

APRIL 1958

CCJ

COMMERCIAL CAR JOURNAL

THE MAGAZINE FOR TRUCK
AND BUS FLEET OPERATORS
A CHILTON PUBLICATION

22nd
FLEET
REFERENCE ANNUAL



NEW... See Page 5



**Even Dodge financing is designed
to save money for fleet operators!**

Often, just when it's most inconvenient to draw on working capital, fleet owners must add new trucks to handle expanding business or to replace older units. That's where the Dodge Bank Fleet Finance Plan comes in.

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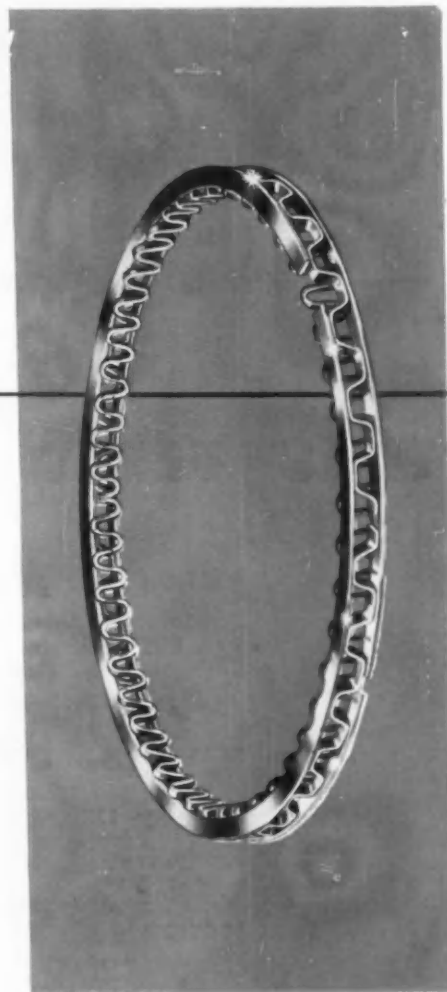


trucks in the United States today use **Pedrick Formflex Rings**

Pedrick Formflex Rings are used as original equipment and/or for official replacement service by the manufacturers who make 73% of all the trucks in use in the United States today.

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COMMERCIAL CAR JOURNAL, April, 1958

COMMERCIAL CAR

April 1958 • Vol. 95 • No. 2

1958 FLEET REFERENCE ANNUAL

SECTION 1 MAINTENANCE

... page 71

In new easy-to-use format, current production truck, bus and passenger car service data—engine tune-up, front end geometry, lube capacities

SECTION 2 STATISTICS

... page 177

Truck, bus, trailer, tonnage and passenger travel facts show numerical size of fleet operations. New this year: Tonnage indexes by commodities

SECTION 3 OPERATION

... page 189

Things you need to know to put your fleet on the road—size and weight limits, safety equipment, vehicle inspection, mud guards, highway taxes

SECTION 4 SELECTION

... page 209

1958 truck and bus specifications, engine power ratings, transmission ratios, third axle specs, trailer suspensions to help you pick right vehicle

SECTION 5 TRAINING

... page 263

Revised list of maintenance manuals, shop training films, safety films for drivers and mechanics, fleet and highway films for better public relations

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JOURNAL

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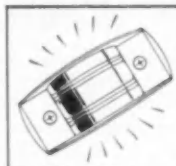
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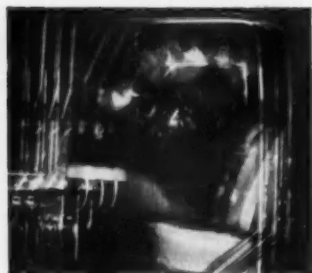


YANKEE: lamps • mirrors • reflectors • signals • emergency lighting
See our important message on page 200

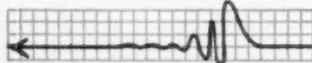


"That's no fish story, Myrtle—Joe's just telling how dragged-out he felt before full-depth Airfoam truck seats!"

**This shakedown
costs more
than you think:**



Spring-and-Padding Truck Seat in Action—multiple-exposure photo shows how such seats amplify drags and jars of normal truck operation. Also, how time-lag in spring action bounces driver UP as controls come DOWN. Driver's reflexes attempt constant compensation during run, resulting in cramped muscles, frazzled nerves, weariness and inefficiency. Even the cushions wear out faster!



Actual "Damping Curve" Chart—showing how spring-and-padding truck seat bounces repeatedly after bumps.

Goodyear, Engineered Products Dept., Akron 16, Ohio

**AIRFOAM
helps drivers,
cuts repairs,
replacements:**



Full-Depth AIRFOAM Truck Seat in Action—multiple-exposure photo shows how over half-a-million fresh-air cushions in each cubic inch of AIRFOAM muffle and absorb drags, jars and jounces. AIRFOAM, being all one piece, also distributes driver's weight, helps him ride with the controls. Result: fresher, happier, more efficient drivers—cushions that don't sag, snag or break down.



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COMMERCIAL CAR JOURNAL, April, 1958

THE OVERLOAD

E D I T O R I A L C O M M E N T

Introducing

YOU'LL pardon our parental pride if we grab this page to introduce our latest arrival—a fully-equipped portable office for our Mobile Editorial Team.

Traveling is, of course, nothing new for COMMERCIAL CAR JOURNAL's editorial staff. But, an office-away-from-the-office is new not only to us but to the whole field of business publications.

With this new unit we feel that we can provide readers with far better on-the-spot coverage of fleet news as it happens. It also fills a vital link in the creation of an entirely new series of major articles to appear soon on the pages of CCJ.

It's a most unusual vehicle. By fully equipped we mean just that. First, there are the "tools" of the editorial trade. On board you'll find:

- Typewriters
- Conference recording equipment
- A records duplicating device
- A battery of cameras
- Projector and screen
- Two-way mobile telephone

In addition it has such equipment as:

- Seating for six in transit or around the conference table
- An LP gas stove (for hot coffee)
- A refrigerator (for ice cubes)
- A sink (to wash dishes)
- A fully-enclosed toilet (for emergencies)
- And bunks (for long-range travel)

Down under . . . there are mechanical innovations too. And many more to be installed later. But these, together with the exact details



Chilton President G. C. Buzby presents Editor Bart Rawson with the keys to CCJ's new mobile office

of its origin, we'd like to keep under wraps for the time being. After all, we want you to *see* the unit first.

And that you will. The mobile editorial team is already on the road. Its heavy travel schedule includes a great number of individual fleet calls plus several conventions. We hope that *you* will be among the first to get a call from our mobile phone.

But if not—after all we can't call on all of our 50,000 readers right away—you'll be seeing much of the new unit on our editorial pages . . . beginning with a complete description next month. From then on you will see how it weaves into our editorial pattern in the months ahead—the better to pick up cost cutting, time saving ideas for your fleet.

Bart Rawson
Editor



These hard workers depend on Texaco

"Texaco lubricants keep our fleet of more than 600 drive-it-yourself trucks in top operating condition. Ever since we started in business, Texaco has given us quality, performance, economy."

—S. J. Palisano, President, Ryder-Lincoln Truck Rental, Inc., Buffalo, N. Y. Charter Member, National Truck Leasing System.

Quality, performance and economy are particularly important to the owner of a fleet of drive-it-yourself trucks. That's because these trucks may often be subjected to much more rigorous use and unusual driving conditions than privately-driven vehicles. But there are still other important advantages offered by the Texaco

lubricants most widely used by fleet operators:

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for clean, smooth, economical operation

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improves truck refrigeration

WITH MAINTENANCE-FREE SUNDSTRAND DRIVES

Pump is driven by the truck engine and mounted under the hood. Reservoir and compressor motor are mounted inside refrigeration unit. Inset shows new refrigerated truck ready to join Wilson's fleet.



There's a new day in truck refrigeration efficiency for Wilson & Co. throughout its nationwide branches. Since the packing firm began using Sundstrand constant speed truck refrigeration drives a few years ago, reports of operating, service, and maintenance costs reaching the company's Chicago headquarters are far below what used to be considered normal. Prolonged operation without interruption has become commonplace. Refrigeration standards are the highest they've ever been, too!

Here are a few comments from Wilson branch managers . . . "Practically trouble-free in two years' operation

. . . good service, 49,000 miles in one year, using it every day . . . 8 trucks running like tops, no problem." It's no accident that Sundstrand constant speed refrigeration drives are setting such outstanding performance records—they were designed for the job. There's nothing complicated about using one to drive your refrigeration unit, either. Just a pump under the hood, plus oil reservoir and motor to drive the compressor in the refrigeration unit itself—that's all it takes.

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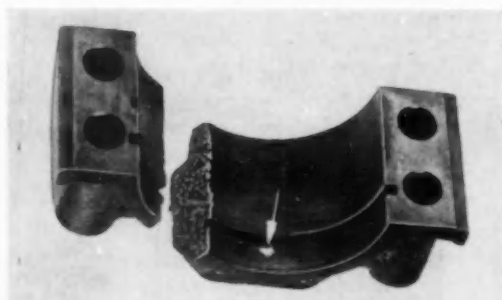
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CCJ

AT YOUR SERVICE

TIMELY NOTES ON MAINTENANCE AND OPERATION Edited by Paul A. Murphy, Technical Editor



"Wha' Done It?"

IN THIS particular instance, the mechanic was directly responsible. In fact, he failed in two ways. First, failure to clean the rear main bearing cap before installing the insert resulted in breaking the cap as shown. Second, in tightening up the main bearing bolts, he did not take the precaution of attempting to rotate the crankshaft by hand but pulled up the bolts to the required torque. (In other words, he did not feel his way.)

In pulling up the last bolt, he heard a sharp crack. In seeking the source of this noise, he discovered that the crankshaft would not turn. He then dismantled the main bearing cap and found it had been broken in two pieces. Further investigation disclosed that a foreign particle embedded between the main bearing cap and the main bearing lower insert was responsible for this damage.

This slipshod work caused comparatively small damage to what it could have caused had this particle of dirt been small enough not to be noticed during assembly. Had it been smaller the engine probably would have been assembled and placed into service, which would have meant that the engine would have to be dis-assembled and necessary repairs made in a very short time.

Ford's Submerged Fuel Pump

ONCE in a while we have to admit it. In the item appearing under the above heading on page 16 of the January issue—we goofed. All of

the article was correct except for one detail. It applied to the externally-mounted electric fuel pump used on some Ford models through 1957. It did not apply to the new submerged in-the-fuel tank unit used on some 1958 models. This new Tokheim pump is a completely sealed unit. Watch for a complete description in the May issue.

Are Your Exhaust System Costs Rising?

AT THE NADA Convention in Miami Beach, C. A. Klaus, vice president, Maremount Automotive Products, Inc., discussed factors that lead up to premature exhaust failures. He pointed out that exhaust parts wear out or deteriorate in an entirely different way from the rest of the vehicle. Most other parts are subject to wear only when the vehicle is running. Practically all the wear on exhaust parts occurs when the vehicle is standing idle after the engine is turned off.

Klaus also pointed out that field surveys indicate that the average muffler life has dropped about 50 per cent during the postwar years. At the present time, average muffler life is about a year and a half, or 15,000 miles in average passenger car service. Here are the things that have caused muffler life to decrease the way it has.

1. Cooler-running dual exhaust systems are more susceptible to corrosion by the exhaust gas condensate.
2. Congestion of over-taxed streets and highways result in cooler exhaust temperatures. This promotes the formation of corroding exhaust gas condensates.
3. The rise in two-car families and the shift to suburban living promotes short run driving which, in turn, brings on premature exhaust system failures.
4. Today's engine requires some pretty potent fuels. These new high octane fuels are producing record amounts of corrosive acids in the exhaust gas condensates.

He went on to say, "Our engineers and research men have been studying the effects of condensates for the past several years. It is definitely established that, as the octane rating of a motor fuel increases, so the acidity of the exhaust gas rises."

(TURN TO PAGE 12, PLEASE)

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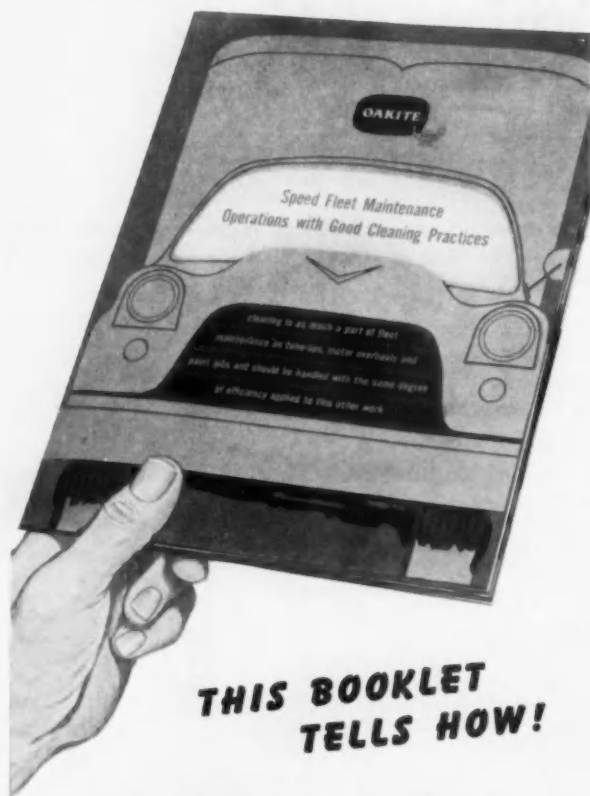
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CITY & STATE

Save maintenance money with faster cleaning

CCJ AT YOUR SERVICE

Continued from Page 9



**THIS BOOKLET
TELLS HOW!**

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- cleaning engines in-place
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Five Point Air Brake Test

EARL T. ANDREWS, general engineer, Bendix-Westinghouse Automotive Air Brake Co., speaking before a group of maintenance men in Baltimore, outlined the following five-point test for air brakes:

1. Pressure Build-up. Drain tanks and start with zero psi. Start engine, and with fast idle (roughly equivalent to 15-20 mph), start timing when pressure reaches 50 psi. Observe lapsed time at 90 psi. Elapsed time should not be over five minutes. Continue running engine until governor cuts out and observe pressure gage reading. Stop engine.

2. With Brakes Released. With a series of foot brake applications, drop pressure to 100 psi. Allow pressure to stabilize one minute or at 90 psi whichever occurs first. Then observe pressure gage and begin timing for two minutes. There should not be more than 2 psi pressure drop per minute for single vehicles or 3 psi drop for combination vehicles. This test to be made with brakes released.

3. With Brake Applied. With full pressure in the system, make full foot brake application. Allow pressure to stabilize for one minute or at 90 psi, whichever occurs first. Then observe gage and time for two minutes. Pressure drop should not be more than 3 psi per minute for single vehicles or more than 4 psi per minute for combination vehicles. Release brakes.

4. Automatic Emergency Brake Test. Make at least four additional foot brake applications and observe gage when trailer brakes are automatically applied. Pressure should not be above 45 lb or below 20 psi. At the same time check operation of low pressure indicator. Should cut in between 70 and 50 psi.

5. Manual Emergency Brake Test. Build up pressure to governor cut-out and operate manual emergency control to observe trailer brake application and release. Build up pressure and with control valve lever in "Normal," disconnect emergency line to trailer for operation of relay emergency valve. Check freedom of operation of reservoir safety valve.

Acceleration Stumble '58 Plymouth

IF A HESITATION is encountered during low speed acceleration on the 318-cu in., V-8 engine, Plymouth recommends that a new stepped-up piston spring be installed (pink in color). Because the new spring is slightly

(TURN TO PAGE 16, PLEASE)



MORE ORIGINAL AND RECAP MILEAGE AT LESS COST

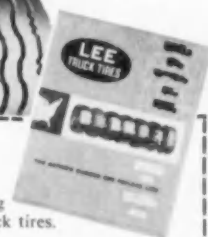
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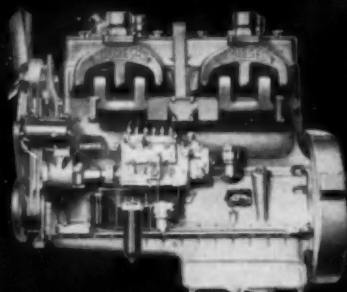
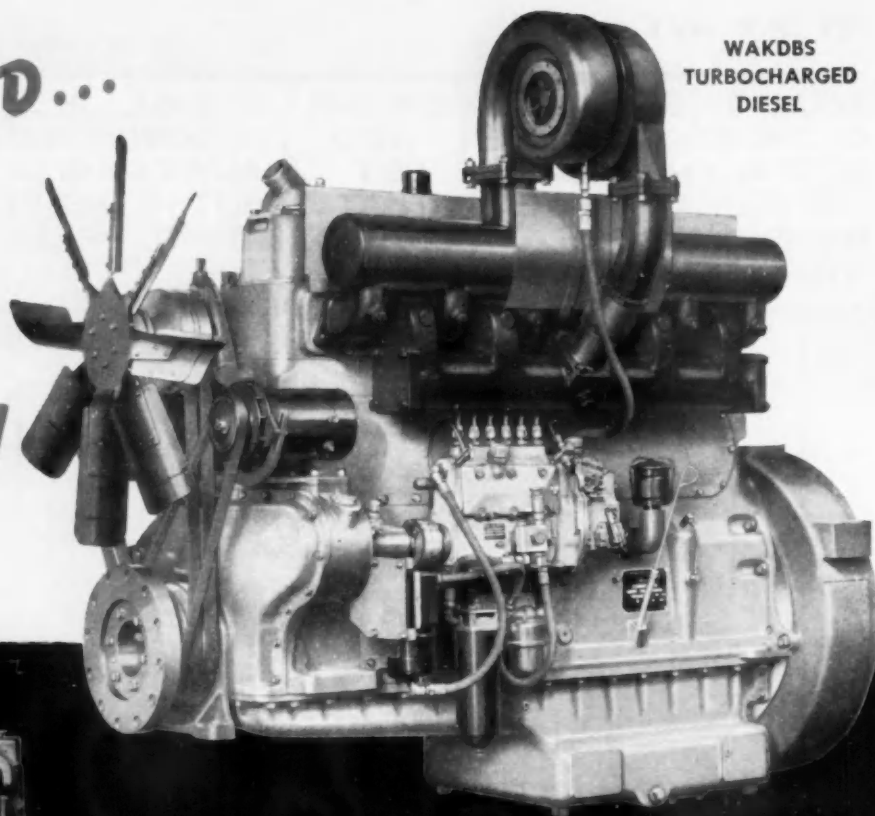


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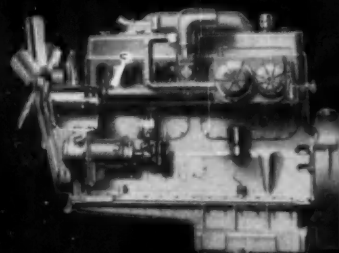
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THE ROAD...
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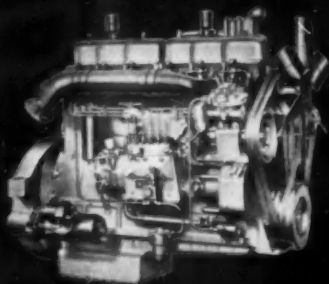
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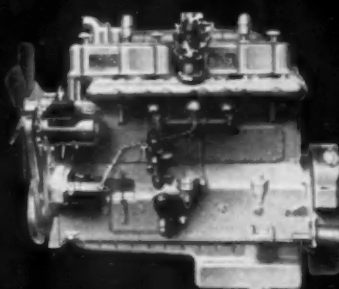


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135-DKBS	6	ACTV	4 1/4 x5	426	400-1800	185	2800
148-DKBS	6	ACTV	5 1/4 x6	779	706-1800	280	2100
WAKDBS	6	ACTV	6 1/4 x6 1/2	1197	1062-1600	352	1800

NORMAL DIESELS

180-DLC	4	AC	3 1/2 x3 3/4	144	102-1800	45	2400
185-DLC	6	A	3 1/2 x3 3/4	216	152-1200	60	2400
190-DLCA	6	AC	3 3/4 x4	265	191-1400	85	2800
195-DLCA	6	AC	4 x4	302	221-1800	98	2800
135-DKB	6	ACV	4 1/4 x5	426	328-1600	147	2800
148-DKB	6	ACV	5 1/4 x6	779	584-1000	200	2100
WAKDB	6	ACV	6 1/4 x6 1/2	1197	845-1000	258	1800

GASOLINE

180-GLB	4	AC	3 1/2 x3 3/4	144	118-1600	45	2400
185-GLB	6	A	3 1/2 x3 3/4	216	176-1400	67	2400
190-GLB	6	A	3 3/4 x4	265	220-1200	77	2400
195-GKA	6	ACV	4 1/4 x4	320	243-1600	122	3000†
MZA	6	A	4 1/4 x4 3/4	404	289-1000	128	2800†
135-GKB	6	ACV	4 1/4 x5	426	337-1200	147	2800†
135-GZB	6	ACV	4 3/8 x5	451	354-1200	153	2800†
140-GKB	6	ACV	4 1/2 x5 1/2	525	425-1000	177	2600†
140-GZB	6	ACV	4 3/8 x5 1/2	554	448-1100	188	2600†
145-GKB	6	ACV	5 1/4 x6	779	595-1000	240	2400†
145-GZB	6	ACV	5 3/8 x6	817	630-1100	250	2400†
WAKB	6	ACV	6 1/4 x6 1/2	1197	1000-1000	280	1800

*FEATURES: A—Aluminum Alloy Pistons; C—Counterbalanced Crankshaft;
T—Turbo-Supercharged; V—Vibration Dampener.

†These engines rated at higher hp and rpm for fire engine service. Send for Bulletin 1079 for LPG ratings and complete listing of engine hp and speed ratings.

ENGINES

**NORMAL and TURBOCHARGED DIESELS
... GASOLINE ... LP GAS**

Write for descriptive bulletins



Truck powered by Waukesha
148-DKB Normal Diesel

334

Sparton

the COMPLETE
TOP QUALITY LINE
of AUTOMOTIVE SAFETY EQUIPMENT
First Choice of Automotive Engineers

HORNS



Tornado All-Electric
Air Horns
Compressed Air Horn



3-D Booster Horn



Red Cap Su-Power
Trumpet Horns



Red Cap Dual
Air-Shell Horns



Marine Horns



Hornet
"Howler"



Rocket

DIRECTIONAL SIGNALS



Roll-O-Turn
Self-Cancelling Switch



Flashing Turn Signals



TRUCK MIRRORS



Trojan Giant



Rectangular



Round



Diminishing

RUNNING LIGHTS



Emergency Lights



Stop and
Tail Lights



Armored
Clearance Lights

SAFETY BELTS



Sparton Karbelts

**SPARTON
AUTOMOTIVE**

DIVISION OF
SPARTON CORPORATION
JACKSON, MICHIGAN



CCJ

AT YOUR SERVICE

Continued from Page 12

stronger than earlier springs, the step up rod moves out of the main metering jets sooner during acceleration allowing the carburetor to deliver more power mixture quickly. Carburetors coded with the date stamped "M-7" or later are equipped with a new spring. (Courtesy Plymouth Technical Product Information Bulletin.)

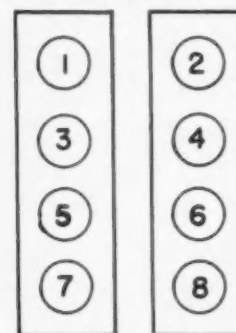
More On Anti-Freeze Removal

IN THE February issue of COMMERCIAL CAR JOURNAL we suggested a mixture of engine oil and butyl cello-solve for removing permanent anti-freeze from the engine oiling system. Since then, we have had several requests on where to buy butyl cello-solve. This product is used in the manufacture of paint, and we suggest you contact your local paint supply dealer.

Locating No. 1 Cylinder

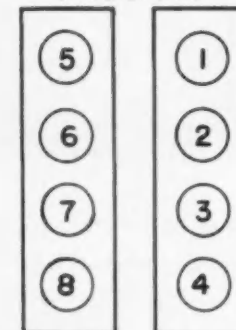
EVER PICK up a timing light and wonder which cylinder was No. 1? Here are two illustrations that cover all V-8 truck engine cylinder numbering.

FRONT



Autocar (LeRoi)
Chevrolet
Dodge
GMC
International
Studebaker

FRONT



Ford
Reo

(TURN TO PAGE 20, PLEASE)



L. E. Erlewine, Supt. of Motor Maintenance WATSON BROS. says:

Mark S. Borland
General
Purchasing
Agent



L. E. Erlewine
Superintendent
of Motor
Maintenance

"We get 6000 to 8000 miles of EFFECTIVE FILTRATION from a single DIESELPAK"*

Here's powerful proof that superior performance **COSTS LESS** than ineffective substitutes

Only LUBER-FINER DIESELPAK, with its *exclusive* specially processed media, removes oil contaminants *effectively*—**FAR LONGER THAN ANY SUBSTITUTE PACK.**

DIESELPAK—designed expressly for use with H.D. detergent compounded oil—removes not only injurious suspended solids, but also colloidal impurities (often more destructive) *without affecting the additives.*

Thus LUBER-FINER DIESELPAK

1. **COSTS LESS** than ineffective substitutes because it gives **MORE MILES** of *effective filtration.*
2. Also **ADDS THOUSANDS OF MILES** to **ENGINE AND OIL LIFE** because its *exclusive* engineered protection **CLEANS OIL FASTER AND KEEPS IT CLEAN LONGER.**

STANDARD AND OPTIONAL EQUIPMENT—On leading Diesel Trucks, Tractors and Stationary Engines.

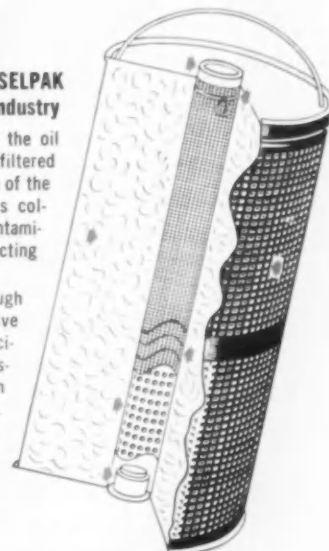
*A typical statement of many users, engineers, and original equipment manufacturers on file.

VISUAL PROOF why DIESELPAK is The Standard of the Industry

Positive end seals prevent the oil from by-passing. The oil is filtered through the patented media of the DIESELPAK which removes colloidal particles and other contaminants without adversely affecting the additives.

The oil then passes through several layers of protective fibrous material which is scientifically engineered to positively prevent media from migrating into the engine.

World renowned engineered protection is enjoyed only by the users of the genuine LUBER-FINER "DIESELPAK."



Luber & Finer

WRITE FOR INFORMATION—how to get **MORE MILES** of effective lubrication at **LESS COST.** Dept. 14.

LUBER-FINER, INC.

2514 South Grand Avenue, Los Angeles 7, California



Look for this nearby
Goodyear dealer sign
for better tire values—
better tire care.

Why New-

THIS MUCH RUBBER
TOPS CONVENTIONAL
TREAD DEPTH

**HI-MILER
CROSS-RIB**

EXTRA RUBBER

**NEW
EXTRA-THICK
TREAD**
—up to 60% more nonskid
depth than conventional rib
truck tires.

**CONVENTIONAL
RIB TIRE**

LESS TREAD-GRIND
—better traction cuts wear of
tread-grinding starts and stops.

WIDER, FLATTER "FOOTPRINT"
—more rubber grips road at all points—
spreads the load, assures stronger trac-
tion and greater stability.

NEW SELF-COOLING DESIGN
—new-principle tread and shoulder dis-
sipate heat, keep temperature at safe
levels.

COOLER-RUNNING, TRIPLE-TOUGH
3-T NYLON CORD
—tougher, lighter, more resilient, doesn't build up
heat like other cords—and is also more heat-resistant!

**3-T
TEMPERED
LIKE STEEL!**

Like steel, tire cord must be tempered to be tough.
Goodyear's exclusive 3-T process, involving Tension,
Temperature and Time, triple-temper cord to make
it TRIPLE-TOUGH—to give you longest tire life, lowest
cost-per-mile!

NEW HI-MILER CROSS-RIB TRUCK

Hi-Miler—T. M. The Goodyear Tire & Rubber Company, Akron, Ohio

Design Truck Tire Shatters Mileage Records

New HI-MILER CROSS-RIB — built with extra-thick tread and Triple-Tough 3-T NYLON CORD Body — cuts cost-per-mile to an all-time low!

IF YOU WANT LOWEST COST-PER-MILE EVER

Here are thousands on thousands of miles of extra nonskid depth — on a tire that masters the heat build-up of long, fast highway runs!

Yes, Goodyear has found the way to bring you an extra-thick tread without a heat-up headache.

Right now, this new HI-MILER CROSS-RIB is saving money for truckers on every type highway operation. Note what these independent operators say:

- 76% more original mileage with Cross-Rib than on former heavy-tread tires! (*State of Washington heavy hauler*)
- Less sideslip, longer nonskid wear with Cross-Rib than any other tire! (*Louisiana produce hauler*)
- 28% more original mileage with

Cross-Rib than any other tires we tested! (*West Coast Van Line*)

- 40% more original mileage with Cross-Rib than with any other tire! (*Mountain state common carrier*)

- Cross-Rib tires still have half their nonskid depth — while other makes on same loop are worn to carcasses! (*East Coast tank line*)

- Tripled previous tires' mileage with Cross-Rib — and 50% of tread still left! (*New York, Chicago and Texas hauler*)

- 154% increased mileage over tires we used before Cross-Rib! (*Eastern U.S. General Freight*)

LIKE TO JOIN THIS KIND OF CHORUS? Then see your Goodyear dealer about trying the new HI-MILER CROSS-RIB on any of your trucks — on any highway run — on any position where you want more miles! Goodyear, Truck Tire Dept., Akron 16, Ohio.

Watch "Goodyear Theater" on TV — every other Monday, 9:30 P.M., E.S.T.

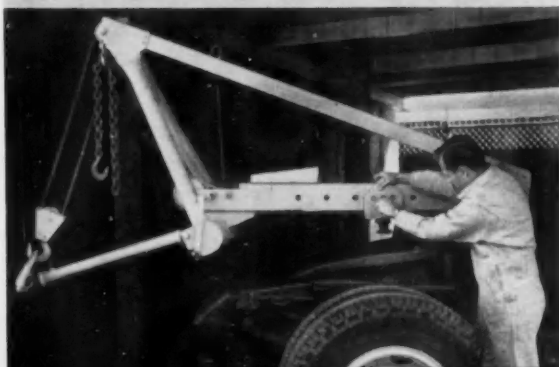
Buy and Specify Tubeless or Tube-Type

TIRES by **GOOD YEAR**

MORE TONS ARE HAULED ON GOODYEAR TRUCK TIRES THAN ON ANY OTHER KIND

You can cut TOWING COSTS WITH THE

NEW **WATSON** **Towmaster**



- ★ Pays for itself in just four tows
- ★ Makes any tractor into a first rate towtruck
- ★ One man can mount or remove it in only 10 minutes
- ★ Fits any tractor fifth wheel

You save both money and time with low cost Towmaster towing. One man can tow out a relief tractor, get the payload underway, and return the disabled tractor to your own shop for repairs by the men who know your equipment best.

The heavy duty Towmaster is big enough for all Highway breakdowns and most wrecks too—even three-axle rigs. All the weight is put on the tractive axle (or axles) to get excellent traction, braking, and maneuverability.



Watson Towmaster has no hydraulic system to dry out, leak or seize—no electrical parts to fail. It's a "lifetime" investment in low-cost towing when and where you need it! Why not get the facts now...write for free illustrated booklet today. Please address Dept. D-4.



**H. S. WATSON
COMPANY**

Emeryville, California
Toledo, Ohio

2

CCJ AT YOUR SERVICE

Continued from Page 16

Shop Air Compressor Inspection

ON AN air compressor the most neglected maintenance is the need for frequent draining of water from the air storage tank. All air compressors are equipped with a plug or shut-off valve at the bottom of the tank for this purpose. Remember, the presence of water in the tank means moisture in the air line, paint equipment or even in lubricating equipment. Aside from the possibility of cold weather freeze up, enough water in the air tank reduces the amount of stored air resulting in more compressor operation.

Compressor oil level and motor oil cups or grease fittings should be checked several times a year or as recommended by the manufacturer. Caution should be taken not to over-lubricate electric motor bearings as lubricant can work into the motor itself.

Examine motor commutator and brushes. Dirty commutator should be cleaned. Brushes that are worn down or worn uneven should be replaced in most cases. Brush replacement is not any more difficult than replacing brushes on automotive generator and can be done by any competent mechanic.

Driving belts should be kept only tight enough to avoid slippage. Belts that are adjusted on the tight side can cause undue wear on motor bearings. A good dusting off with a high pressure air hose will aid cooling. Accumulation of dust or dirt on the cooling fins of the compressor or on the motor will cause the unit to run on the warm side. Clean the general area of all obstacles that could interfere with proper air circulation around the unit.

Dodge Truck Service

ACCORDING to Dodge, some reports from the field say that under certain types of heavy duty operation, cracking of the header welds on 40-gal fuel tanks may be encountered. This condition can be corrected by placing a 3/4-in. plywood sheet under the tanks, between the tank supports or by welding a piece of angle or channel iron between the side supports.

Also, Dodge reports they have a new composition head gasket for the 331 and 354 cu in. engines. They suggested that this gasket be used as a service replacement because of its superior sealing qualities. Available as Part No. 1826128, it can be used in engines built since 1954.

(TURN TO PAGE 24, PLEASE)



GREY-ROCK "TIMBER KING" MOLDED-WOVEN BLOCKS —YOUR BEST ANSWER TO HEAT FADE, EXCESSIVE WEAR, COSTLY DRUM REPLACEMENT

Many fleet brake problems can be licked with regular Grey-Rock molded blocks. But where braking conditions are severe—where something more rugged is needed—Grey-Rock "Timber King" molded-woven combinations are your best answer to heat fade, excessive wear, and costly drum replacement.

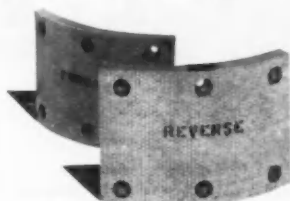
The secret of "Timber King" is a woven block used in combination with the right molded block. A special

weave provides slight compressibility, assuring full lining-to-drum contact, eliminating localized high temperatures. Zinc alloy wire in the woven block draws heat from the braking surface—helps "condition" the drum.

If you want to improve your cost-per-mile—give Grey-Rock "Timber King" a try on your fleet. They can save you real money in better braking, better wear and longer drum life! See your Grey-Rock jobber.



For light trucks... Grey-Rock Balanced Trucksets
They're special lining combinations—woven, molded and woven-molded combinations—engineered for light and medium trucks. You get more miles between relines, less drum replacement, lower maintenance costs—all adding up to lower cost-per-mile.



Only **Grey-Rock** *makes*

BALANCED BRAKSET LININGS

BALANCED BRAKSETS • TRUCKSETS • BRAKE BLOCKS • VEE-LOK® CLUTCH FACINGS

GREY-ROCK DIVISION of Raybestos-Manhattan, Inc., Manheim, Pa.



RAYBESTOS-MANHATTAN, INC., Brake Linings • Brake Blocks • Clutch Facings • Mechanical Packings • Asbestos Textiles
Industrial Rubber • Sintered Metal Products • Engineered Plastics • Rubber Covered Equipment • Abrasive and Diamond Wheels
Industrial Adhesives • Laundry Pads and Covers • Bowling Balls



Abner Holmstrum,
Superintendent of
Tractor Shop,
Watson Bros., Omaha.

One of the Watson Bros'. tractors
equipped with the ASF Safety 5th Wheel.



*Why Watson Bros...
leading truckers with
headquarters in Omaha...
use ASF Safety 5th wheels*

Wide selection of ASF brackets

Safety and economy are uppermost in the mind of any experienced shop superintendent, like Abner Holmstrum of Watson Bros. But plain *convenience* is also something to consider in choosing a 5th Wheel. Here's what Mr. Holmstrum has to say about a mighty convenient option offered by ASF:

"One of the big reasons why our new tractors are being equipped with ASF 5th Wheels is the wide choice of bracket heights.

"It's important to us to have the 5th Wheel plate exactly 48" off the road. Our tractors will vary in height, depending on the make. The selection of brackets allows us to maintain proper height with-

out excess shimmiing, and the flush-type base is just the design we needed for our adjustable mounting.

"Another feature we like is the safety of the ASF lock design. Our drivers know the wheel is locked, just by looking at the safety latch."

There's just one point which could be added to that statement: *specifying the bracket design of your choice doesn't cost you one extra cent!* You simply make it part of your order. For complete information about ASF Safety 5th Wheels, contact your nearest ASF Distributor or write directly to American Steel Foundries, Hammond Division, Hohman Avenue and Hoffman Street, Hammond, Indiana.

Remember this... about ASF Safety 5th

Just the bracket you need—to solve YOUR mounting problem!

Standard bracket—8 $\frac{3}{4}$ " over-all height—as furnished unless otherwise specified when ordering.



Wide-base bracket—for angle-type mounting, without mounting plate. Choice of over-all 8 $\frac{3}{4}$ " or extra low 6 $\frac{3}{4}$ " height.



Flush type, which mounts flush with outside width of 34" truck frame, is designed for use with adjustable mountings. Choice of over-all 8 $\frac{3}{4}$ " or extra-low 6 $\frac{3}{4}$ " mounting height.



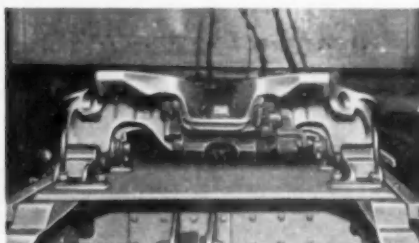


helped solve their mounting problems

Here's how Watson Bros. build an adjustable mounting



Mounting starts with attachment of specially fabricated rails. Note how ASF flush-type bracket aligns neatly with rail and makes this type of mounting practical.



This is followed by a $\frac{1}{2}$ " mounting plate, 38" long and 28" wide ...



...and completed with ASF Safety 5th Wheel. Mounting has 4 adjustments: wheel can be moved as much as 36" on tractor frame to handle larger trailers without exceeding maximum over-all length.

wheels

ASF Safety 5th Wheels can be equipped with any of these brackets at time of purchase at no extra charge!



Make an investment
in safety...
with

ASF safety 5th wheels



"Translucent vinyl-coated nylon tarps handle easier, need little maintenance"

—says Mr. John F. Ernsthausen,
President, Norwalk Truck Lines

"We selected vinyl-coated nylon tarps for their lightweight handling ease on about 400 of our trailers. Just one man can cover a truck. And freight handlers find loading operations improved, because these tarps let light through for increased visibility inside the truck.

"Coated nylon tarps are waterproof . . . rain and dew dry off quickly. They're dirt-resistant, too. Our Maintenance Department has never had to clean them. Since our switch to coated nylon, we've been able to trim man-hours devoted to tarp handling by one-third."

FIND OUT how coated nylon tarps can improve your fleet operations. Ask your fabricator or supplier for information, or drop a line to: E. I. du Pont de Nemours & Co. (Inc.), 5518 Nemours Building, Wilmington 98, Delaware.



Better Things for Better Living . . . through Chemistry

COATED NYLON FOR TARPS—LONG WEARING . . . LIGHTWEIGHT
...EASY TO HANDLE...WATERPROOF...RESISTANT TO ROT AND MILDEW

CCJ AT YOUR SERVICE

Continued from Page 20

Chevrolet Body Repair School

DURING April, May and June, Chevrolet fleet operators will have the opportunity to enroll inexperienced men in a two week basic body repair training program at their GM Training Center.

Student participation, and practice sessions, in all phases of the program give the Fisher Body Instructor an opportunity to observe and instruct each man on an individual basis.

A third week of training—to be offered after the student has completed the two-week course and has had actual working experience—is available to complete and round-out the training given in the first two weeks.

Classes will be formed and scheduled through your Chevrolet Zone office. Contact your Zone Service Manager, Service Representative or District Manager for details.

Mixing Sulphuric Acid with Water

WHEN WORKING with uncut sulphuric acid, always wear protective clothing, and especially safety glasses to prevent acid from contacting the hands, face, body, and particularly the eyes, in the event it is accidentally splashed.

When mixing an acid-water solution, **NEVER** pour the water into the acid. When acid and water are mixed, heat is generated instantaneously. If a small amount of water is poured into a large amount of acid, the heat generated cannot be dissipated fast enough by the acid, the water will turn to steam, and the acid will be splattered about. When a small bit of acid is poured into a large amount of water, the water will dissipate this heat before it can build up pressure.

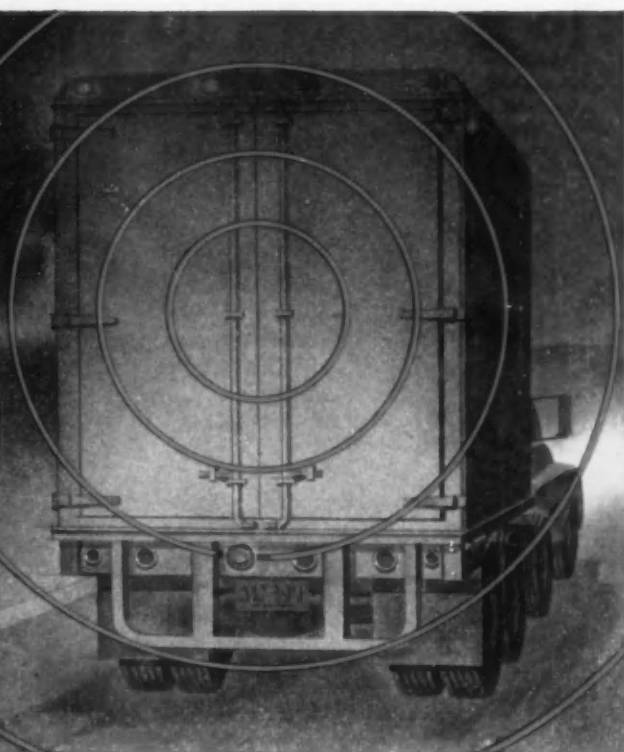
When Battery Acid is Spilled . . .

IF BATTERY acid is spilled, immediate action is required to check or eliminate its effects:

1. Acid splashed in the eye should be washed out immediately and thoroughly with plenty of cold water—then, play it safe—see a doctor.
2. Acid on other parts of the body should be removed immediately by washing thoroughly with cold water.
3. Acid on parts of the car or clothing should be washed immediately with cold water and the area neutralized with a solution of baking soda or household ammonia.

(TURN TO PAGE 28, PLEASE)

Poor rear-end lighting makes your truck a **TARGET** in the dark



**Even on turnpikes, rear-end accidents account for over half the collisions!
Proper lighting with General Electric lamps can help reduce accidents!**

When the rear ends of trucks, tractors and trailers are poorly lighted, you may be borrowing trouble. Good lighting costs so little . . . and can save so much in lives, property, time and dollars. So don't be satisfied just because your equipment meets minimum I.C.C. or state lighting requirements. Remember, too, that good lighting maintenance is essential, not only at the shop or terminal, but enroute as well.

G-E "PILOT CHECK" FOR REAR LIGHTING SAFETY

1. Clean all lamp lenses before each trip and at stops.
2. Clean lenses often in bad weather.
3. Check wiring for frayed insulation and loose connections.
4. Be sure all bulbs are burning brightly.
5. Replace "burn-outs" with the right replacement lamps.

**THERE'S A G-E AUTOMOTIVE BULB
FOR EVERY TRUCK LIGHTING JOB**
From the "go" lights on the front to

the "stop" lights on the rear, there are General Electric lamps tailored to do each lighting job. Accurate filament location, uniformity in candlepower and electrical rating insure peak lighting performance of G-E miniature lamps. G-E All-Glass Sealed Beam type units operate at maximum efficiency and maintain their light output throughout life. More and more truck operators are making use of these benefits in Class A direction signals, back-up and stop light services.

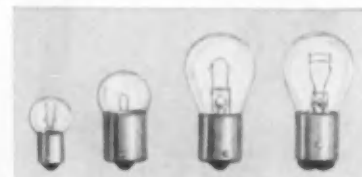
Makers of the finest lighting systems for commercial vehicles use G-E Lamps to assure long and trouble-free performance. So look for the G-E monogram on lamps in the units you buy. And order a stock of G-E Bulbs for emergency replacement, too. Your G-E Wholesaler offers quick delivery on his complete line. General Electric, Miniature Lamp Dept., Nela Park, Cleveland 12, Ohio.



LEFT: Sealed Beam Turn Signal, red, amber or clear lens, 6 or 12 volt; 4½" diameter.

CENTER: Jumbo warning or stop light, red lens, 6 or 12 volt; 7" diameter.

RIGHT: Back-up and Utility Bulb—red or clear lens, 6 or 12 volt; 5¾" diameter.



DOZENS OF TYPES and sizes of replacement bulbs are made by General Electric for every use from bumper to tailgate.

Progress Is Our Most Important Product

GENERAL  ELECTRIC

**TOUGHEST
SHAFTS
FOR
ANY
REPLACEMENT**



U.S.

AXLE SHAFTS

Every U.S. AXLE SHAFT takes more punishment, gives more service because modern, proved hardening processes in its makeup produce up to *five times greater resistance* to road shock, stress and strain. Only heat-treated fine alloy steels are eligible for this extra toughening and U.S. precision engineering. They fill the nation's No. 1 demand for replacement axles for every passenger, commercial and heavy-duty vehicle.

Contact your U.S. AXLE JOBBER. He has the exact shaft to fit your needs.

"THE WORLD TURNS ON U. S. AXLES"

**WRITE FOR
FREE
VALUABLE GUIDE**

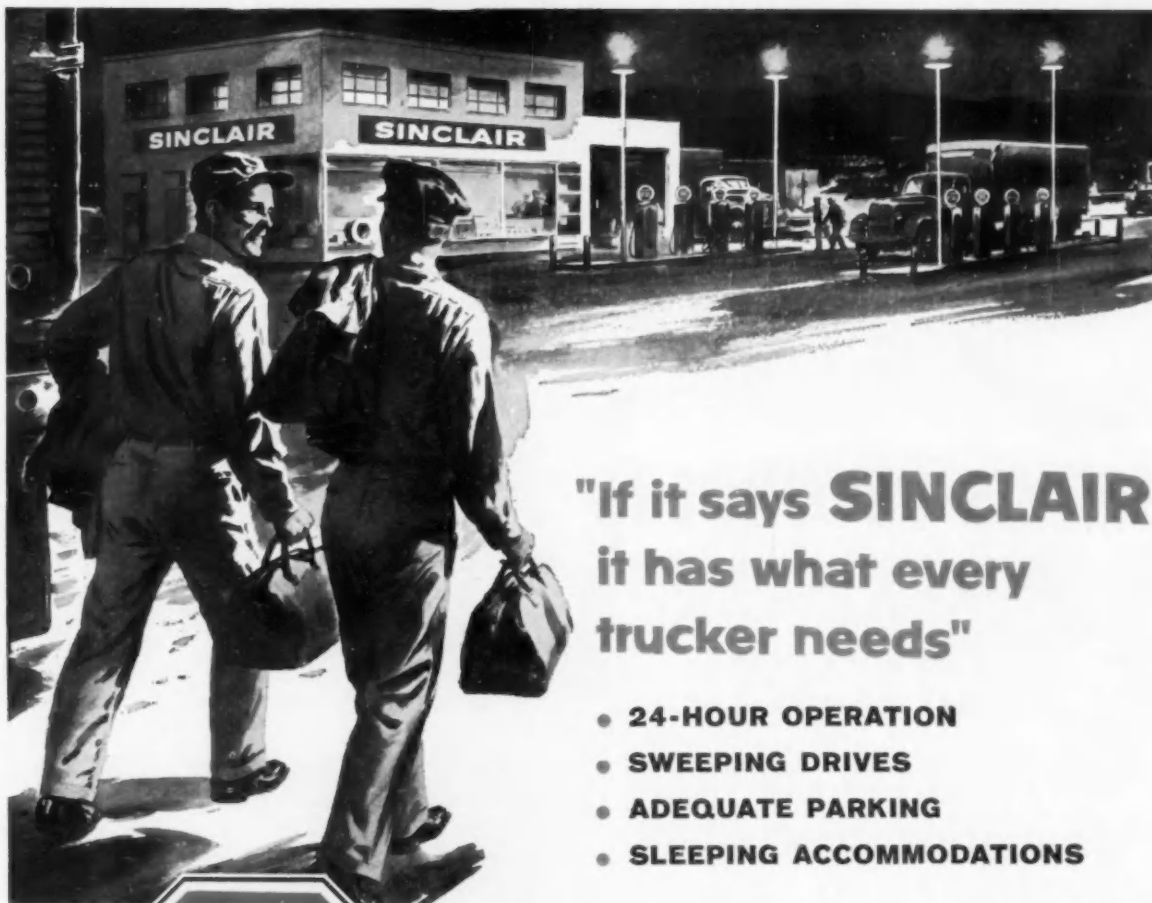
*"Causes and Prevention of
Axle Shaft Failures"*

SHOT-PEENED
to make them
up to

**5 TIMES
TOUGHER**

THE U.S. AXLE COMPANY, INC.

Since 1920 • Pottstown, Pennsylvania



**"If it says SINCLAIR
it has what every
trucker needs"**

- 24-HOUR OPERATION
- SWEEPING DRIVES
- ADEQUATE PARKING
- SLEEPING ACCOMMODATIONS



Long-distance truckers rely on the modern conveniences at Sinclair-Planned Truck Stops. They're good stops to schedule—to help keep trucks on schedule.

These facilities are typical: 24-hour operation, road service, tire "banks," sweeping drives, spacious parking, repair facilities, etc.

Also, Sinclair planning provides for the physical comfort of drivers... up-to-date shaving and shower facilities, good food, comfortable beds and TV lounges for relaxation.

FREE ROUTE SURVEY SERVICE — What's more, Sinclair's Route Survey Service provides an individual analysis on any Trucker's routing problem. It shows the most practical, direct routes with modern truck stops. For complete information fill out and mail the coupon. No obligation.

Dino the Sinclair Dinosaur
says:
"MAIL THIS COUPON."



SINCLAIR REFINING COMPANY

Truck and Bus Sales Division • 600 Fifth Avenue, New York 20, N.Y.

At no obligation, send me:

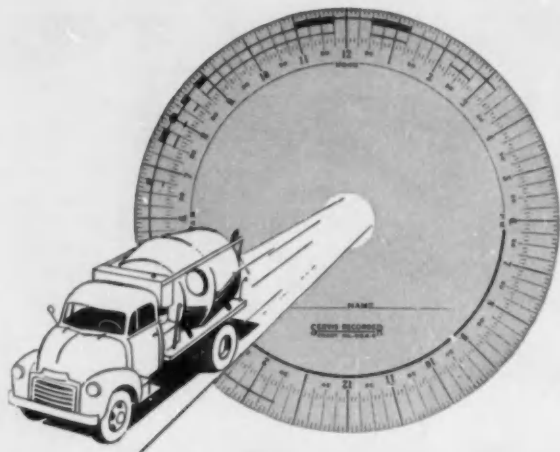
- ☐ Booklet Listing Truck Stops
☐ Information on Sinclair's Route Survey Service

NAME

COMPANY

POSITION

ADDRESS



SERVIS RECORDERS STOP MANAGEMENT HEADACHES

Will This Truck Get to its Destination Without Costly Delay?

A Servis Recorder and its permanent easily-read chart will tell you.

If it was delayed, then the reason can be established by following up this chart. Unauthorized delays—when, how long, how often they occur, are charted for you by tamperproof Servis Recorders. Travel time is shown, too, in this complete report of all your truck's activities—day and night!

Permanent type records can be charted for daily, weekly, or for 3 day periods.

Surprising how soon Servis Recorders put the brakes on idle time. They spotlight the good work and the poor . . . for an investment as low as \$40.00* per unit.

Write for Catalog # 54,
or for the name of one of
our experienced represen-
tatives to call.

*Federal
Excise Tax
Extra.



THE SERVICE RECORDER COMPANY
1013F Rockwell Ave., Cleveland 14, Ohio

The Servis Recorder
Tells Every Move Your Truck Makes

CCJ AT YOUR SERVICE

Continued from Page 24

Dual Exhaust Combustion Test

IN DUAL exhaust equipped engines, due to the restricting action of the manifold heat control valve, a greater quantity of exhaust gas will pass through the tail pipe opposite the side in which the control valve is located. Since the location of these valves varies on vehicle makes, and it is possible to get a reading from either pipe, especially when checking out the high speed circuit, before attaching the combustion analyzer pickup gun, start the engine and let run at idle, observe which pipe is passing the most exhaust, then attach the pickup unit.

Air Vibrators Help Bus Cleaner

CHICAGO Transit Authority is using oversized vacuum cleaners that mount tightly against the front door of the bus. In use, dirt, dust, newspapers and transfers are sucked right



out of the bus. Papers and transfers follow escaping air and become entangled in the screen at the top of the trash bin. To prevent this debris from destroying the vacuum, CTA attached air vibrators to the screen on each trash bin. These vibrators joggle the screen between bus cleanings, and knock all the trash to the floor of the bin, returning the vacuum to normal.

Diesel Fuel Injection School

AS A RESULT of its recent move into new quarters, Bacharach Industrial Instrument Co., 200 North Braddock Ave., Pittsburgh 8, Pa., has expanded its diesel fuel injection service shop school program. This school covers training in servicing all popular makes and types of fuel injection nozzles, injectors and fuel pumps. School, normally of one week duration, is open to users of Bacharach equipment. It is held periodically when groups of sufficient size can be arranged.



CREATIVE ENGINEERING FOR
THE PUBLIC UTILITY INDUSTRY
SINCE 1892



Illustrating YORK-HOOVER CONVENIENT SPARE WHEEL SLIDING SHELF. Can also be used for additional tool or material carrying compartment.



Illustrating NEW YORK-HOOVER EXTRUDED NEOPRENE GUIDES for overhead ladder brackets that prevent chafing wear on ladder rails.



Illustrating NEW YORK-HOOVER EXTRUDED NEOPRENE DOOR SEALS—more durable than sponge rubber—also prevents doors freezing to seals in cold weather.


BODY DIVISION
YORK-HOOVER CORPORATION
YORK, PENNSYLVANIA

this is the latest design **20IU76 BODY**



THESE FEATURES MAKE THE YORK-HOOVER 20IU76 SERVICE BODY THE LATEST

Yes, these and many more *cost-saving features* including—lightweight, yet rugged construction—adjustable, partitioned drawers—and flush type, paddle handles—make the York-Hoover 20IU76 Service Body the latest in *design*—*construction*—in overall *efficiency*. Write for complete details today! Make sure *you* have the latest design 20IU76 Service Body—the *York-Hoover 20IU76*.

CLIP 
AND MAIL
TODAY!

Dept. 2C, York-Hoover Corporation
York, Pa.

Please send me a copy of Bulletin No. 937 covering your 20IU76 Service Body.

Name _____

Company _____

Address _____

City and State _____

ENGINEER'S FIELD REPORT

PRODUCT RPM DELO OILS
FIRM H & R TRANSFER COMPANY
Phoenix, Arizona



240,000 miles without an overhaul for transport truck using RPM DELO Oil

LUBRICATED WITH RPM DELO Special Oil since new, a 200 h.p. Mack truck operated by H & R Transfer Company has completed 240,000 miles of highway hauling service without overhaul—and is still on the job. Engine has required only one valve job, and at that time, was reported very clean with no piston, ring or bearing changes necessary.

Another truck on this same haul went 200,000 miles before engine was pulled down. Owner H. J. Hart says, "Complete overhauls cost us \$1,500. Anything that stretches time between overhaul periods really saves us money—and that's RPM DELO Special."

Pulling 35-foot stainless steel vans, three of these trucks each travel 80,000 miles a year. H & R Transfer also uses RPM DELO Oil in 51 other trucks and five cranes.



TRADEMARK "RPM DELO" AND DESIGN REG. U. S. PAT. OFF.

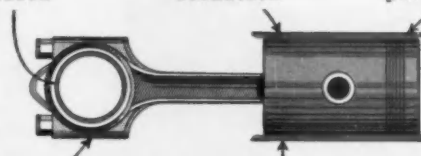
STANDARD OIL COMPANY OF CALIFORNIA, San Francisco 20 • STANDARD OIL COMPANY OF TEXAS, El Paso
THE CALIFORNIA OIL COMPANY, Perth Amboy, New Jersey • THE CALIFORNIA COMPANY, Denver 1, Colorado

Why RPM DELO Oils prolong engine life

Special compounds stop corrosion

Anti-oxidant resists lacquer formation

Detergent keeps all parts clean



Metal-adhesion qualities keep oil on parts in running or idle engine—inhibitor resists foaming.

For More Information about this or any other petroleum product, or the name of your nearest distributor, write or call any of the companies below.

CHECK THE CHANGES IN



SINCE 1901



including BOSTROM



seats

From the handle-steering White "Steamer" of 1901 to the powerful 1958 Model 9000—that's White Truck progress in 57 years.

Among hundreds of White improvements during those years, an important recent one is the availability of Bostrom "Level-Ride" 80 Seats. Here is a revolutionary change in driver comfort—giving him a "passenger-car" ride in a White Truck. The "Level-Ride" 80 seat is optional on virtually all White Truck models.

With a Bostrom "Level-Ride" 80 seat, the driver floats over bumps and jolts in a straight line. Vibration and shock are isolated in the exclusive Bostrom suspension system between the seat and the floor of



Bostrom "Level-Ride" 80 Suspension Seat

the cab. Giant torsion springs in this suspension system flex like your knees—absorbing the shock otherwise transmitted to the driver. Back slap and irritating rubbing are eliminated, too.

Leading fleet owners and their drivers praise Bostrom "Level-Ride" 80 Seats. All truck manufacturers offer them, factory-installed as optional equipment. Your older trucks may also be equipped with "Level-Ride" through your dealer or parts jobber. See your Bostrom distributor.

Bostrom Manufacturing Company, 133 W. Oregon St., Milwaukee 4, Wis.

FREE MOTION PICTURE IN SOUND AND COLOR "Gentlemen, Be Seated," an informative film on safer, more productive highway travel, is available for group showings. No charge. Write or wire for booking date.





GMC TRUCKS...more rugged, powerful and dependable than ever before...GMC is one of the leading engine manufacturers using Perfect Circle piston rings for both original equipment and replacement service.

Much history has been written since the early days when Perfect Circle began making parts to put horsepower into the "horseless carriage." Year after year, we have been privileged to take an active part in the development of the wonderful vehicle that is today's truck.

Because they are specifically engineered to meet the exacting demands of modern high-compression engines, Perfect Circle piston rings are preferred by more engine manufacturers for

original equipment and for replacement service than any other brand.

When engine overhaul time comes, do as the manufacturers do! Specify Perfect Circles. PC 2-in-1 Chrome piston rings more than *double* the life of cylinders, pistons and rings, assure sustained power with lasting oil economy. Perfect Circle Corporation, Hagerstown, Indiana. The Perfect Circle Co., Ltd., 888 Don Mills Road, Don Mills, Ontario.

PERFECT CIRCLE PISTON RINGS



UP FRONT WITH CCJ

APRIL 1958 FLEET HIGHLIGHTS AS REPORTED BY COMMERCIAL CAR JOURNAL

MR. EXECUTIVE, Interstate Commerce Commission last month proposed two changes in its Safety Regulations. First affects sections 193.40 and 193.41, requires parking brakes to be independent of air or other power assists when applied. Second rewords Section 193.51, set minimum standards for operation of low pressure warning signals and requires pressure gages. Here's how the proposals are worded . . .

193.40 ICC wants to change third sentence of this Section to read: "One such braking means shall be a parking brake which shall conform to the requirements of Section 193.41."

193.41 If adopted, the new rule would be: "Every bus, truck, or truck-tractor shall be equipped with one or more parking brakes capable of locking the driving wheels and adequate under any condition of loading to hold, to the limit of traction of such braked wheels, such vehicle or combination of vehicles to which such motor vehicle may be attached on any grade on which said vehicle or combination of vehicles is to be operated. The operating controls of such parking brakes shall be independent of the operating controls of the service brakes. The parking brakes and the operating controls thereof shall be so arranged and maintained that the brakes may be applied without the use of power or energy other than the driver's muscular effort or spring action, and maintained in applied condition without further attention, despite exhaustion of any source of energy or leakage."

193.51 New wording proposed for this section says: "Warning devices and gages. Every powered motor vehicle using compressed air or vacuum for the operation of its own brakes or the brakes on any towed vehicle shall be equipped with a warning signal readily audible or visible to the driver which will operate at and below one-half the compressor governor cut-out pressure for air brakes and a warning signal readily audible or visible to the driver which will operate at and below 10 inches of mercury for vacuum brakes provided that a single signal may be arranged to serve both purposes where desired. In addition, each such vehicle shall be equipped with a pressure gage arranged to indicate the pressure available for braking in pounds per square inch for air brakes and with a vacuum gage arranged to indicate the vacuum available for braking in inches of mercury for vacuum brakes, which gages shall be maintained in operative condition."

DETROIT DISPATCH

PLASTIC CABS FOR heavy duty trucks may be here sooner than expected. One company reportedly will announce one very shortly. However, cost factors are expected to limit their application to low volume models. New plastic cab is said to weigh 250 lb as compared to 700 lb for steel. Cost is upwards of \$300 over a conventional steel cab.

PLASTIC CAB IS being experimented with by another large truck maker. It's going to subject the fiber glass reinforced plastic component to normal rugged truck service to see how it stands-up compared with standard steel cabs.

TUBELESS TIRES, SAYS Firestone, enable fleet operators to realize a \$200-a-year savings per truck as a result of extra payload. Tubeless tires plus one-piece drop center rims reduce unsprung weight by more than 100 lb per axle, says the manufacturer. Further, says Firestone, fleets report 80 per cent of tubeless tires suitable for retreading as compared to about 60 per cent for tube-type tires.

MAINTENANCE AND garage costs for class 1 intercity bus fleets come to 7.14 cents per bus mile, represent about 18 per cent of operating expenses. Figures are based on 1956 data, latest available, as reported by National Assn. of Motorbus Operators. Comparable figures for 1946 were 6.72 cents, 23 per cent.

FLXIBLE CO. ANNOUNCES its stock of replacement straight-8 Buick engines is exhausted. However an adequate supply of cylinder crankcases, crankshafts, heads, camshafts and other components for rebuilding these engines are available from the Parts & Service Dept. Note: The department will be closed April 21 through May 4 for inventory.

HENRY J. NAVE HAS been elected executive vice president of The White Motor Co. He's been with White since 1950, most recently held the position of president of The White Motor Co. of Canada.

DIAMOND T STOCKHOLDERS late last month were considering a proposal from White whereby White would acquire Diamond T's inventories, tools, fixtures and good will.

BUS FLEETS OFFERING maintenance service to other fleets will be listed in a new guide being prepared by American Transit Assn. Name, address and phone number of shop will be given along with directions for finding it, hours of service, facilities and services available (towing, road repair, tires, fuels, storage, reeler repair, etc.)

DIESEL TAXICAB IS being used in South Bend, Ind. It's a Mercedes-Benz Model No. 180-D cab distributed by Studebaker-Packard Corp. Its 4-cyl diesel engine has a 19:1 compression ratio, turns out some 46 hp. Fuel con-

WASHINGTON WATCH

CONGRESS, MIDDLE OF last month, was busy debating such anti-recession measures as (1) income tax cuts, (2) excise tax cuts, (3) accelerated and/or expanded highway building and other public works programs. Most likely outcome: Expansion in highway building and no sizeable tax cuts.

TRANSAMERICAN FREIGHT Lines is in substantial compliance with the Interstate Commerce Commission's safety regs. So reports the ICC in its final decision on Docket No. MC-C-2140 (Oct. '57, page 33) ordering the proceedings to be discontinued.

MOTORISTS AROUND the country last month had a chance to see General Tire & Rubber's latest ATA Foundation project. Over 600 highway billboards showed a stork carrying a baby with a caption reading, "Trucks bring everything else."

TRUCKS ALSO got a televised salute middle of last month on Lawrence Welk's Dance Party program as part of Dodge's Foundation program. Earlier, Dodge—through the Foundation—distributed books on the motor carrier industry to all college and university libraries.

sumption is reported at 42 miles per gallon of diesel fuel. Indiana Cab Co. estimates it will save \$1000 a year in fuel expense alone to more than offset the \$1000 higher initial cost of the vehicle.

TRAILER AIR SUSPENSION IS being worked-on at Fruehauf. New unit is expected to be introduced this year along with a new line of high cube, stainless steel trailers.

NEW MANIFOLD DESIGN BY Mack Engineer J. F. Greathouse is reported to save nearly 12 lb in weight, 40 per cent in cost. It involves a switch from sand cast aluminum manifolds to new design stamped in halves from sheet metal and welded into a single unit. Mack says it will save about \$70,000 a year in production of diesel engine air inlet manifolds.

COMPRESSION IGNITION ENGINES WILL replace conventional spark ignition engines in nearly all combat vehicles by 1962 says Army's Detroit Ordnance-Tank Automotive Command. Under development for four years, the new engines will use a fuel injection system.

REPLACEMENT PARTS BUSINESS WILL total about \$5 billion in 1958, says R. S. Withers, GM's United Motors Service Division general manager. Car and truck owners are expected to provide a five per cent increase in demand according to a distributor survey.

FLEET WINNERS IN the Great Dane sponsored ATA Foundation Fleet Public Relations Contest (Jan., page 34) were announced last month. Allied Van Lines took top prize, Pacific Inter-mountain Express was second with Dan Dugan Oil Transport in third. Watch your May issue for a full scale report on the contest—with lots of ideas on what you can do to improve your PR.

OVERLOAD FINES ARE NOT deductible as a business expense when computing federal income tax, ruled the U. S. Supreme Court late last month.

TRUCK TONNAGE

1957 INDEX OF intercity truck tonnage as reported by American Trucking Assns. Research Dept. is 184, up two points over 1956. By regions, gains in 1957 over 1956 were registered in New England, Middle Atlantic, Southern, Northwestern, Southwestern and Rocky Mountain areas. By commodities, gains were chalked-up in Household Goods, Heavy Machinery, Liquid Petroleum Products, Refrigerated Liquids, Refrigerated Solids and Motor Vehicles. Full details on the indexes plus many other interesting fleet facts for 1957 are given in this issue's special eight-page statistical section beginning on page 177.

Month	% Change from Previous Month	% Change from a Year Ago
4th Quarter '57	.....	+ 0.9
December, 1957	-10.2	+ 0.2
November, 1957	-14.4	- 4.8
October, 1957	+ 5.6	+ 0.2
3rd Quarter '57	.....	+ 6.5
September, 1957	- 3.6	+ 4.8
August, 1957	+ 7.5	+ 2.5
July, 1957	+ 1.3	+ 7.3
2nd Quarter '57	.....	- 1.7
June, 1957	+ 6.6	- 3.9
May, 1957	+ 2.7	0.0
April, 1957	.....	+ 3.1
1st Quarter '57	.....	+ 0.7
March, 1957	+ 7.5	- 1.8
February, 1957	- 7.0	- 2.4
January, 1957	+14.4	+ 3.7

TRUCK AND BUS PRODUCTION

Make	For Weeks Ending			Year to Date	
	March 15	March 8	March 1	1956	1957
Chevrolet	6,536	6,380	5,535	61,747	79,523
G. M. C.	1,256	1,245	1,469	13,586	18,488
Diamond T	105	105	160	1,162	860
Divco	60	60	60	624	945
Dodge and Fargo	1,291	1,093	1,236	11,473	19,632
Ford	4,577	4,091	4,667	51,006	68,405
F. W. D.	35	33	.....	274	261
International	141	2,319	2,286	23,793	18,599
Mack	356	234	380	3,090	3,947
Studebaker	303	234	224	2,428	2,389
White	354	347	372	4,012	4,356
Willys	1,869	1,785	1,076	17,104	16,534
Other Trucks	60	65	65	650	956
Total—Trucks	17,063	17,901	17,450	190,949	232,496
Buses	60	65	90	824	786
Total—Trucks and Buses	17,143	18,056	17,540	191,773	233,282

Source: Automobile Manufacturers Assn.

IN THIS ISSUE

MR. TRUCK, BUS or PASSENGER CAR Fleet Operator, **YOU'LL** find the facts you want to know to keep your **FLEET** at peak **EFFICIENCY**

On Page 71—an index by makes to completely revised, easy-to-use **MAINTENANCE** data.

On page 177—an index by vehicle type to the latest truck, bus and trailer **STATISTICS**.

On page 189—an index by subject to state laws and regulations that affect your **OPERATION**.

On page 209—an index to specifications to help you in vehicle and component **SELECTION**.

On page 263—an index to service manuals and films for mechanic and driver **TRAINING**.

The Road Ahead



MAY'S A BIG MONTH FOR fleet operators. During the entire month, fleets will be cooperating in the National Vehicle Safety Check by running their vehicles through community-sponsored safety check lanes or through local committee-approved inspections in the fleet's own shop. It has American Trucking Assn. backing.

OTHER NATIONAL FLEET events in May, as reported last month, include (1) ATA's Operation Council meeting, May 4-8, Jung Hotel, New Orleans, La., (2) National Transportation Week, May 11-17, (3) ATA Council of Safety Supervisors meeting, May 13-15, Cleveland Hotel, Cleveland, Ohio, (4) National Truck, Trailer & Equipment Show, May 15-18, Great Western Exhibit Bldg., Los Angeles, Cal.

MORE FEDERAL REGULATION OF motor vehicles is asked for in several proposals now pending before Congress. One would authorize the Secretary of Commerce to require "reasonable safety devices" on automobiles in interstate commerce. Another specifically would require such equipment as governors, safety padding, steering gear, lights, vision aids and tires that meet federal standards. Still another proposes governors limiting speed to 50 mph. Also asked for are "Certificates of fitness" from vehicle makers stating that new vehicles have been inspected and road tested. One would prohibit use of vehicles whose exhaust is found dangerous to human health by the Surgeon General of the Public Health Service.

BIG QUESTION—WHO PAYS how much for what size highway?—probably won't be answered until 1961. As expected (Dec. '57, page 36), Dept. of Commerce has asked for a two-year delay in answering the question. Reason is, it says, data from the AASHO Road Test won't be ready to incorporate into the answer until then.

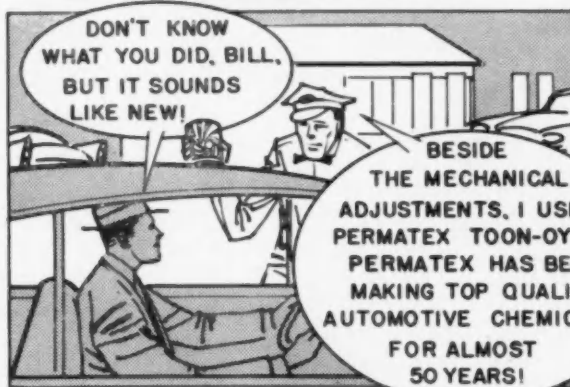
NEW HIGHWAY PROGRAM WILL be needed by 1970 predicts Bradley D. Nash, Deputy Undersecretary of Commerce for Transportation. By the time the present program is completed, he says it's to be filled to overflowing with the traffic. What's needed, he suggests, is to start immediately on a new highway program when the current one is finished.

MORE DIESEL MODELS ARE in the works. Ford is reported close to making a decision. It is now looking at both GM and Cummins units. Probable application is in the heavy duty trucks announced recently (Jan., page 100). Another maker getting ready to offer a diesel is Dodge, which hopes to make it available in 1959. It will be a Cummins engine.

JANUARY, 1958, PRODUCTION figures are given in the chart below. For a detailed statistical summary of 1957 production, see page 177.

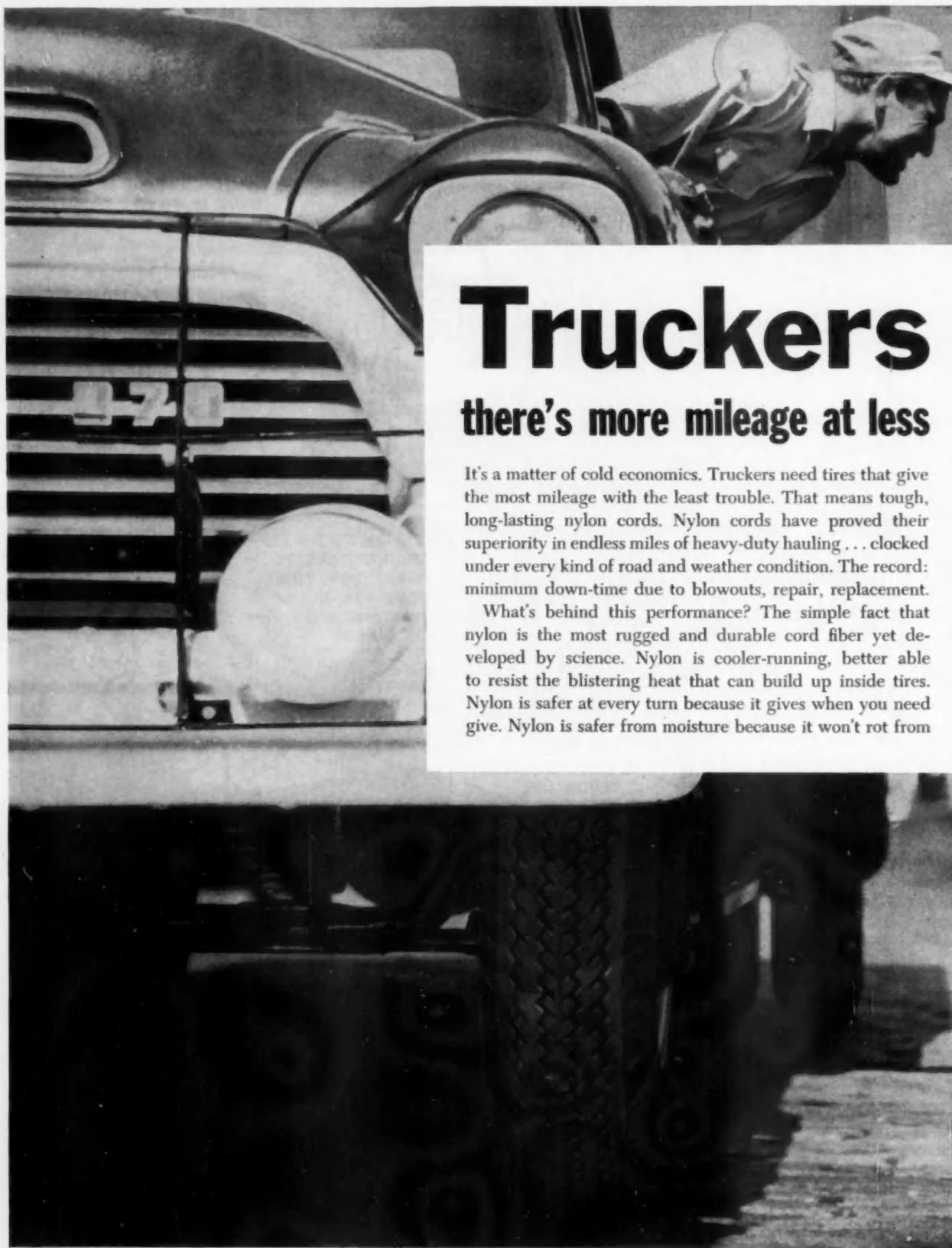
In thousands of units, except bus sales are in actual numbers	New Truck Registrations	Truck Factory Sales—Domestic	Truck Trailer Shipments	Bus Factory Sales—Domestic	Truck and Bus Tires		
					Replacement Shipments	Original Equip. Shipments	Inventory End of Jan.
	January	January	January	January	January	January	
1958	52.4	64.0	3.3	293	673.6	276.7	3470.5
1957	57.0	73.2	5.0	257	676.2	304.5	3510.8

PERMATEX PETE AND TOON-OYL SAVE THE DAY!



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Factories: Brooklyn 35, N. Y., Kansas City 15, Kan.



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there's more mileage at less

It's a matter of cold economics. Truckers need tires that give the most mileage with the least trouble. That means tough, long-lasting nylon cords. Nylon cords have proved their superiority in endless miles of heavy-duty hauling... clocked under every kind of road and weather condition. The record: minimum down-time due to blowouts, repair, replacement.

What's behind this performance? The simple fact that nylon is the most rugged and durable cord fiber yet developed by science. Nylon is cooler-running, better able to resist the blistering heat that can build up inside tires. Nylon is safer at every turn because it gives when you need give. Nylon is safer from moisture because it won't rot from

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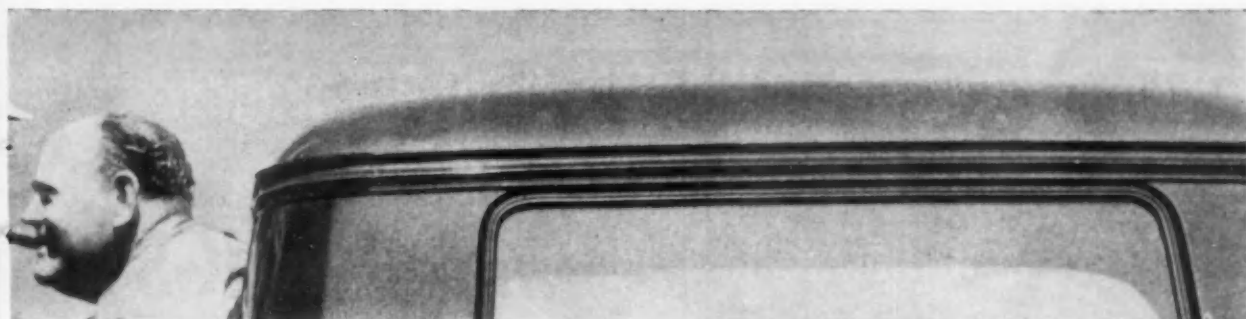
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Ohio;

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agree!

cost with nylon cords

water seeping in through cracks. Nylon is safer from bruise damage because it's more shock-absorbent.

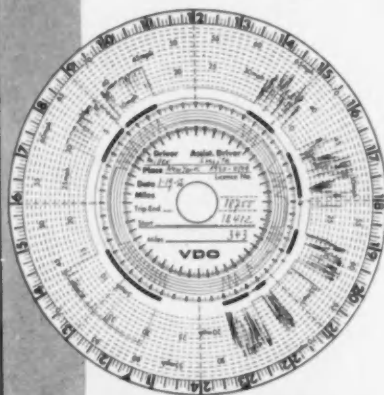
Today, The Chemstrand Corporation, one of the country's major nylon yarn suppliers, is working to make nylon even stronger, even more blowout proof. For you this means more for your tire dollar: more trouble-free mileage, more on-time deliveries, more safety, and because nylon means stronger casings . . . more recaps.

Sound reasons for you making your next tires—nylon cords!

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DRIVING with the**TACHOGRAPH**

**FLIPS
OPEN
AT
HINGE
TO
THIS
CHART**



INDICATES . . . Speed
Distance
Time



RECORDS . . . Speed at any moment
Distance covered
Driving and stop periods



WARNS . . . When the desired preadjusted
speed is reached

The tachograph records vehicle operation in chart form, maintaining a permanent accurate record for uninterrupted periods up to seven days of speed, mileage, and whether the vehicle is moving or stopped. Manufactured by VDO Instruments, Frankfurt, Germany and Detroit, Michigan, it is distributed in the U. S. A. solely by Engler, manufacturers of the well-known Hubodometers and AC and DC Hour Meters

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DATES and DOINGS

APRIL

- 13-16—Western Highway Institute, Annual Meeting, El Mirador Hotel, Palm Springs, Cal.
- 13-16—Customer Relations Council, American Trucking Assn., Balmoral Hotel, Miami Beach, Fla.
- 15—Transportation Assn. of America, Board Meeting, Hotel Statler, Washington, D. C.
- 15-17—American Welding Society, Annual Show, Kiel Auditorium, St. Louis, Mo.
- 16-19—Alabama Trucking Assn., Annual Meeting, Hotel Admiral Semmis, Mobile, Ala.
- 18-20—New Jersey Motor Truck Assn., Annual Convention, Hotel Berkeley-Carteret, Asbury Park, N. J.
- 23-25—Automotive Wholesalers and Manufacturers Representatives, Spring Booth Conference, Bon Air Hotel, Augusta, Ga.
- 27-May 1—National Tank Truck Carriers, Annual Meeting, Boca Raton Hotel, Boca Raton, Fla.

MAY

- 4-6—Washington Motor Transport Assn., Annual Meeting, Chinook Hotel, Yakima, Wash.
- 4-8—Terminal Operations Council, American Trucking Assns., Annual Meeting, Jung Hotel, New Orleans, La.
- 4-8—Common Carrier Conference—Irrregular Route, American Trucking Assns., Boca Raton Hotel and Club, Boca Raton, Fla.
- 5-7—American Transit Assn., Regional Conference, Hotel Del Coronado, San Diego, Cal.
- 5-9—American Gas Assn., Edison Electric Institute, Joint Motor Vehicle Committee Meeting, Roosevelt and Commodore Hotels, New York, N. Y.
- 6-8—National Highway Users Conference, Seventh Highway Transportation Congress, Mayflower Hotel, Washington, D. C.
- 11-14—Automotive Engine Rebuilders Assn., Annual Meeting, Sheraton-Park Hotel, Washington, D. C.
- 11-17—National Transportation Week.
- 12-14—Ohio Trucking Assn., Annual Meeting, Hotel Carter, Cleveland, Ohio.
- 13-16—Council of Safety Supervisors, American Trucking Assns., Annual Meeting, Hotel Cleveland, Cleveland, Ohio.
- 15-17—Georgia Motor Trucking Assn., Annual Meeting, General Oglethorpe Hotel, Savannah, Ga.
- 15-18—1958 National Truck, Trailer and Equipment Show, Great Western Bldg., Los Angeles, Cal.
- 19-22—National Accounting and Finance Council, Annual Meeting, Statler-Hilton Hotel, Dallas, Texas.
- 19-23—National Fire Protection Assn., Annual Meeting, Palmer House, Chicago, Ill.
- 20—Rhode Island Truck Owners' Assn., Annual Meeting, Sheraton-Biltmore Hotel, Providence, R. I.
- 22-23—American Trucking Assns., Committee of 100, Edgewater Beach Hotel, Chicago, Ill.
- 27-28—Midwest Shipper-Motor Carrier Conference, Schroeder Hotel, Milwaukee, Wis.

Wagner AIR-OVER-HYDRAULIC Brake Actuation provides safe braking of heavy vehicles that use hydraulic foundation brakes

With the **Wagner**
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*You gain the advantages of passenger car
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- **SINGLE ACTION BRAKE APPLICATION**
(eliminates uncertain two-stage feel)
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BRAKING PRESSURE DUE TO HIGH CAPACITY
APPLICATION VALVE.**

Get the whole story on Wagner Air-Over-Hydraulic Systems—first in economy, reliability and safety.

SEND FOR CATALOG KU-201. It points out the many advantages you gain with Wagner Air-Over-Hydraulic actuation on all your vehicles equipped with hydraulic foundation brakes.

With 35 years of experience in manufacturing braking systems, Wagner is the *only* manufacturer producing *all* of the air and hydraulic components necessary for a complete air-over-hydraulic power brake system. Specify this fine equipment on your new vehicles. When ordering tractors, include Wagner's Tractor Protection System in your specification.

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WK58-B



MULTI-MILLION MILERS



YELLOW CAB COMPANY operates a fleet of 500 vehicles some 20 million miles a year in San Francisco's rugged hills and traffic. Mr. W. L. Rothschild, Jr., Purchasing Agent of Yellow Cab in San Francisco, has used Auto-Lite products for the past ten years. He says, "Every purchasing agent has to choose parts that pay off in longer operation and a minimum of down-time. In my experience, Auto-Lite has never failed to live up to these requirements. That's the reason we use Auto-Lite products throughout."

FOR LESS DOWN-TIME, LOWER MAINTENANCE COSTS, INSTALL . . .

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**SPARK PLUGS
BATTERIES
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ORIGINAL
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Auto-Lite manufactures over 400 products, including a complete line of Spark Plugs, Batteries, Wire and Cable, and Automotive Electrical Systems . . . sold throughout the United States and Canada.

prove that it pays to Standardize on Auto-Lite!

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AUTO-LITE SPARK PLUGS, original equipment on many leading makes of cars, trucks, and tractors, are ignition-engineered to give top performance. The complete line includes Auto-Lite Transport Spark Plugs with heavier insulator and over-sized electrodes for extra heavy service . . . and Auto-Lite Resistor Spark Plugs with Power Tip that "fire up" overhead-valve passenger car engines at all speeds.



AUTO-LITE STA-FUL BATTERIES are proved by a two-million-mile test to be the finest batteries money can buy. The Sta-ful *extra liquid reserve* offers additional protection for rugged fleet operations. Available dry-charged or wet, Auto-Lite Sta-ful *needs water only 1/3 as often*. Heavy case construction and advanced engineering assure long life in the most severe service. Available in 6 or 12 volts.



AUTO-LITE ORIGINAL SERVICE PARTS give safe, dependable performance in the circuits designed for Auto-Lite equipment. Matching Auto-Lite coils, distributors, voltage regulators, condensers, and contact points assure full, *balanced* power.

AUTO-LITE WIRE AND CABLE is available for all cars and trucks. Neosheath Spark Plug Wire has neoprene insulation that resists heat, oil, ozone, and rough service. Plastic and Flextrand Primary Wire and Power Line Cables are available for every need.



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REVIEWING THE BEST IN CURRENT PUBLICATIONS ON MAINTENANCE, EQUIPMENT
AND SAFETY OF INTEREST TO TRUCK, BUS AND CONSTRUCTION FLEET OPERATORS

Government Publications

issued recently of special interest to truck, bus and construction fleets are listed below. They are available at the prices indicated

from Supt. of Documents

U. S. Government Printing Office, Washington 25, D. C.

The Agricultural Exemption in Interstate Trucking, Marketing Research Report No. 188 (40¢) is a comprehensive booklet tracing exemptions to ICC regulations. Specific cases are cited. A judicial history is also presented including opinions and actual court cases. Other sections deal with The Motor Carrier Act of 1935 and the changes since then which affect agricultural trucking.

Automotive Transportation in Defense or War, Catalog No. IC 1 DEF.2:AU 8 (25¢) reviews the role of American cars during World War II, showing their effects on the national economy. A section is devoted to service requirements of essential automobile use. Other sections deal with auto production requirements in the event of a national emergency.

Radio Laws of The United States, Catalog No. Y 1.2:R 11/957 (55¢) contains all laws relating to radio operations from 1910 to August, 1956. Two-way vehicle communications laws are included.

First Progress Report of The Highway Cost Allocation Study, Catalog No. 85-1:H.doc.106 (35¢) is a preliminary report covering the highway cost allocation and vehicle taxation problems. Part of the report gives the early progress of the study.

Tornado Safety Rules, Catalog No. C 30.6:T 63/2/957 (5¢) and **Tornadoes, What They Are and What to Do About Them, Catalog No. C30.2:T 63/4/957 (5¢)** both give information on the cause and formation of tornadoes, safeguards and protective measures against them. Helpful hints for equipment operators and contractors working in the tornado belt.

Methods of Testing Small Fire Extinguishers, TRA-365 (15¢) is a study of the effectiveness of five types of small fire extinguishers on 10 different varieties of fires. Results are of interest to fleet operators wanting to know the best extinguishing agents for their fire protection problems.

Tests of A Sprinkler System for Hot-Weather Hauling of Live Hogs in Truck-Trailers, Marketing Research Report No. 172 (15¢). Results from 16 tests show that loss of weight on route and weight of meat after slaughter were much improved by use of a sprinkler system. Cost of sprayer system was \$75.00 per trailer. Report gives full information and diagrams of sprayer as well as other heat problems faced by hog haulers. Is of interest to truckers hauling live stock of any kind.

Tank-Mounted Air Compressors, Commercial Standard No. CS126-56 (10¢) explains the standard method of tests, ratings, certification and labeling of tank-mounted compressors. The pamphlet gives all the required specifications needed to meet the Commercial Rating.

Explosives Drivers Handbook, Catalog No. D 215.9:2239 (\$2.00) gives regulations, driver qualifications and driver responsibilities. It lists fire fighting regulations and required procedures based on Navy regulations. A helpful guide for explosives haulers.

Pursuit Driving, Catalog No. T 22.19:D 83 (15¢) is a handbook for law-enforcement officers who are often engaged in running down violators. It gives valuable tips on passing, curves, sharp turns, safety precautions and car maintenance. It's good information for highway patrol police.

Automobile Seat Belts, Catalog No. 85-1:H Rept. 1275 (10¢) is a report of the Special Sub-committee on Traffic Safety showing the value of seat belts in reducing the degree of injury as a result of accidents.

Food Transportation Data

from the Office of Information

U. S. Dept. of Agriculture, Washington 25, D. C.

is reported in two recent publications. The first is "A Curtain to Help Maintain Temperatures in Local Refrigerated Delivery Trucks" which tells about a plastic door curtain mounted inside the rear door and cuts down the escape of cold air when the door is opened for deliveries. Ask for free Marketing Research Report No. 176. The second report is "How Bulk Assembly Changes Milk Marketing Cost" which tells the advantages and cost savings of hauling bulk milk from farms to packaging plants in tank trucks and trailers. For a free copy, ask for Marketing Research Report No. 190.

Brake Relining Manual

from Johns-Manville

22 East 40th St., New York 16, N. Y.

describes all types of brake and brake control systems used on commercial vehicles. The 72-page "Fleet Reliner's Manual" features practical data and charts to help maintenance supervisors, shop foremen and mechanics in servicing and maintaining brakes. The manual can also be used as a training aid for new men. It has charts and descriptions of mechanical, hydraulic, air, vacuum and electric systems such as Westinghouse, B-K, Midland, Wagner, Warner and others. Sections are devoted to inspection and maintenance directions for systems on buses, trucks and trailers. It's free.

FOR RECENT MANUFACTURERS' LITERATURE, SEE PAGE 324

BEARINGS OF ALCOA ALUMINUM OUTPERFORM ALL OTHER SOLID-WALL BEARINGS...

Only aluminum has the combination of advantages demanded for the best all-around performance of solid-wall bearings. Alcoa® Aluminum alloys have the unmatched combination of these advantages to give you bearings that:

Withstand heaviest loads . . . Solid aluminum bearings withstand loads up to 10,000 psi on projected area.

Run cooler . . . Aluminum is the best heat conductor among bearing materials, and this means cooler running bearings . . . as much as 20° cooler by actual test.

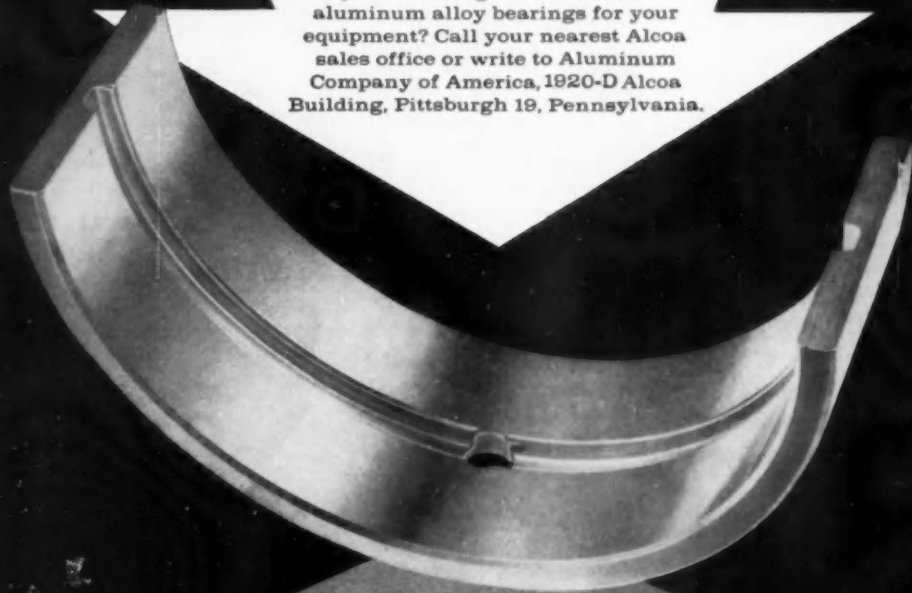
Conform readily . . . Aluminum has good ductility, conforms readily to misaligned shafts or nonparallel pins and thus reduces unit loading for longer bearing life.

Have ideal embeddability . . . Aluminum embeds particles far better than bronze, but not as deeply as babbitt. Dirt particles roll out easily and are trapped by the filter.

Resist corrosion . . . Aluminum bearings do not corrode . . . are unaffected by additives in oils, need no protective coating.

Have design flexibility . . . The structural properties of aluminum give great design flexibility, ease of machinability.

Why not investigate the use of solid aluminum alloy bearings for your equipment? Call your nearest Alcoa sales office or write to Aluminum Company of America, 1920-D Alcoa Building, Pittsburgh 19, Pennsylvania.



Your Guide to the Best in Aluminum Values



"ALCOA THEATRE"
Exciting Adventure,
Alternate Monday Evenings



*your luck can **fade**...*

RED BLOCK CAN'T!

In spite of the tremendous temperatures generated by high speed stops and sustained downhill braking, **WORLD BESTOS Red Block** will not fade.

Here's why

The special Red Block *high-friction formula* develops full friction at temperatures as high as 1300°. It removes glaze and water film from drums and maintains a perfect braking surface. As a result, less braking pressure is required and braking time is shortened. You get more miles between re-lines, less drum wear and *no fade due to heat or water*.

Why gamble with costly equipment and cargos when you can have Red Block safety and dependability? Especially when Red Block more than pays for itself in mileage and lower maintenance costs! Prove it for yourself—Call your **WORLD BESTOS** Distributor or write direct to **WORLD BESTOS**, New Castle, Indiana for full details and prices.



You Can't Beat WORLD BESTOS Red Block Combination for Safety!


No matter what the load or road conditions, Red Block Combination will not fade. It can't fade because it's specially engineered to overcome high temperatures associated with heavy-duty fleet service.

WORLD BESTOS

**NEW CASTLE
INDIANA**

FOR TRAILER BODY CONSTRUCTION AND REPAIR


LINER FASTENING...



NEW!

PLY-HEAD* DRIVE RIVETS
hold plywood liner to frame
*The trade name PLY-HEAD is the property of South Chester Corporation

OUTER SKIN FASTENING...



SOUTHCO DRIVE RIVETS
hold outside metal sheet to frame

FAST APPLICATION AND TIGHT GRIP

Original equipment and replacement costs are reduced with Southco Blind Drive Rivets and "PLY-HEAD" Rivets. Application is speeded and high loading pressures are obtained. Built-in "pull-up" action automatically assures uniformly tight joints.

The extra large underhead bearing area of "PLY-HEAD"

Rivets greatly reduces failure of the plywood surface at the fastening point.

A hammer is the only tool needed to expand these Southco Rivets. Special tool costs and maintenance are eliminated. No buck-up or finishing operations are required. There is no noise, no waste, no clean-up.

Simplify your body building and maintenance operations; send for complete data now. Southco Division, South Chester Corp., 228 Industrial Highway, Lester, Pa.



Southco Div., South Chester Corp.
228 Industrial Highway
Lester, Pa.

Please send me your new, illustrated Southco Blind Drive Rivet Catalog containing sizes, types and specifications.

NAME _____
COMPANY _____
ADDRESS _____
CITY _____ ZONE _____ STATE _____

SOUTHCO FASTENERS
©1957 **LION**



Provides Widest Range of Protection yet for every
type of Drive Axle and Mechanical Transmission

Mobilube GX



... Multipurpose-Type Gear Lubricant for Today's Heavier Loads... Higher Road Speeds

Mobilube GX—the first commercially available multipurpose-type gear lubricant that protects commercial fleet axles and transmissions under the severest operating conditions—was developed to answer the greater strains imposed by increasing payloads and ever-higher road speeds.

In a series of 100,000-mile fleet highway service and torture tests over rough logging roads, Mobilube GX gave complete protection to gear tooth and bearing surfaces under the toughest service conditions. Such tests made by users and manufacturers are your assurance of Mobilube GX's ability to safeguard fleet axles and transmissions at all times... under all kinds of conditions!



Correct Lubrication

**Another reason why
you're Miles Ahead with Mobil**

*Tune in "TRACKDOWN" every week,
CBS-TV. See your local paper for time and station.*

SGCONY MOBIL OIL COMPANY, INC., and Affiliates: MAGNOLIA PETROLEUM COMPANY, GENERAL PETROLEUM CORPORATION



FOREMOST—INTERNATIONAL DAIRIES, Inc.
GENERAL OFFICE—JACKSONVILLE FLORIDA

February 4, 1958

Address Reply To:
 P. O. Box 4518
 JACKSONVILLE, FLORIDA

Truck Refrigeration Service, Inc.
 2111 W. Beaver Street
 Jacksonville, Fla.

Gentlemen:

It is a pleasure for us to report to you on the operation of the seven Tropic-Aire—Carrier truck refrigeration units that you have delivered to us.

We are hauling ice cream at -10 to -20 degrees F. with these units, day in and day out. Holding constant temperature is a "must" in this type of operation and our Tropic-Aire—Carrier models have done a remarkable job for us in that respect. We have found them economical and they have given us practically trouble-free road service.

As you know, we took delivery on our first Tropic-Aire—Carrier a year ago today. It was from our first hand experience with this unit that the decision was made to equip our other trailers with these units and we have had no cause to regret this decision.

Yours very truly,

FOREMOST DAIRIES, INC.

E. C. Baker
 E. C. Baker

ECB/ab

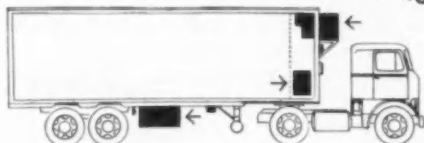
What more
 could we
 say!

TROPIC-AIRE



MOBILE REFRIGERATION / AIR CONDITIONING

FRONT, UNDERSLUNG OR INTERNAL MOUNTING



McGRAW-EDISON CO. • Clark Division
 5201 West 65th Street • Chicago 38, Illinois

"Tropic-Aire—Carrier" is a trademark of McGraw-Edison Co., Chicago.
 Copyright 1958 by McGraw-Edison Co.



Laugh it off!

Carburetor Specialist: "Last night I dreamed I was alone with Marilyn Monroe in a canoe."

Shop Foreman: "What a dream! How'd it turn out?"

Carburetor Specialist: "Wonderful. I caught a ten-pound bass."

Traffic Cop: "What's the idea racing your truck through the town at 45 miles an hour?"

City Delivery Driver: "I don't have any brakes and I am in a hurry to get back to my terminal before something happens."

Diesel Mechanic Frank: "Women, Women, it seems every place I go I see women taking our places. Why, I even hear that Fleety-Fleet Express has a new woman dynamometer specialist."

Diesel Mechanic Hank: "Yeah, so far as modern woman's sex is concerned, it bars her from nothing but fatherhood and gent's washrooms."

FREIGHT HANDLER: "So — YOU'RE GOING OUT WITH ANOTHER MAN? HAVE YOU LOST YOUR RESPECT FOR THAT ENGAGEMENT RING I GAVE YOU?"

CAUTIOUS CUTIE: "YES. A JEWELER TOLD ME WHAT IT WAS WORTH THE OTHER DAY."

Cici Jay says: "I never go riding with my boy friend any more, because he sees spots before his eyes — lonely spots along the side of the road."

Steno Molly: "It's shameful the way that new truck driver friend of mine starts making passes at me after a half-dozen drinks."

Steno Polly: "What's shameful about that?"

Steno Molly: "Wasting five drinks."

Fat Freight Handler: "Say you saw my gal Mabel down town this afternoon?"

Slim Freight Handler: "Don't know. Didn't notice. Too windy."

Landlady: "Now, see here, young lady. What were you doing in the living room with that new Truck Driver boy friend of yours 'til three o'clock this morning?"

Gorgeous Blonde: "Why nothing wrong, Ma'am, George and I were playing Monopoly last night. First he kissed me, then I kissed him. Then he hugged me, then I hugged him. Then . . ."

Landlady: "Just a second. That's Monopoly? Who taught you how to play it?"

Gorgeous Blonde: "Why, George did!"

"Cici Jay"



"How did you ever walk into that closed door?"

DIESEL TRANSIT DRIVER: "HEY, WAITRESS, HEY!"

DINER WAITRESS: "KEEP YOUR HALTER ON MAC AND DON'T SLIP YOUR TRACES. WE'LL HAVE TO SEND OUT FOR YOUR HAY."

College Boy: "But, Dad, I want to go where there's glamour, women, liquors . . . don't hold me back."

Tank Fleet Operator: "I'm not holding you back. Take me with you."

Terminal Manager: "Wasn't that an unusual accident involving that U-Hauler Express City Driver, yesterday?"

City Dispatcher: "What happened to him?"

Terminal Manager: "He swallowed a spoon while drinking his coffee."

City Dispatcher: "How's he getting along?"

Terminal Manager: "They say he can hardly stir."

DEJECTED CUTIE: "HARRY, I WANT YOU TO KNOW THAT RIGHT NOW I AM SITTING ON THE RAGGED EDGE OF DISPAIR."

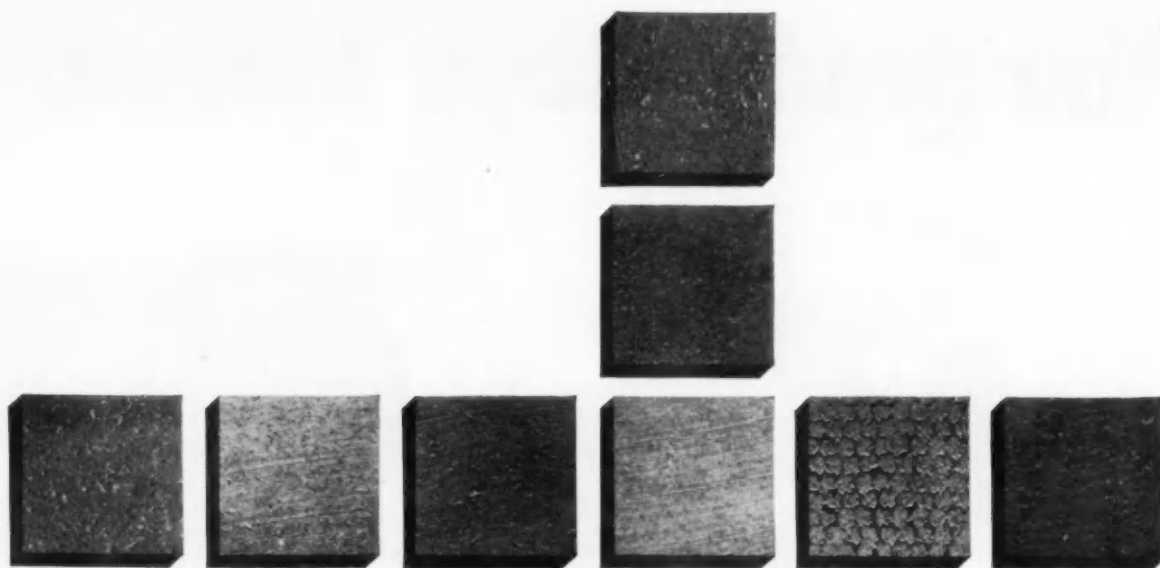
TRAFFIC RATE CLERK: "MY GOODNESS, HONEY. DON'T WORRY. I DIDN'T EVEN KNOW YOU TORE 'EM. I'LL BUY YOU ANOTHER PAIR."

There was once a man named McGruder

Who canoed with a girl in Bermuder.

But the girl thought it crude
To be wooed in the nude,
So McGruder took an oar and subduder.

Resume Work



Yes, Raybestos[®] offers you 8 different friction materials in the right combinations to suit your requirements . . . giving you greater safety, longer block wear, and better drum life at a lower cost per mile . . . no matter what your equipment or where you operate.

8

Raybestos
AMERICA'S BIGGEST SELLING FRICTION MATERIAL

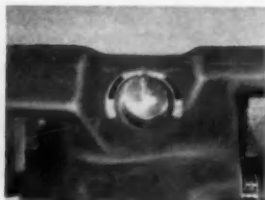


RAYBESTOS DIVISION of Raybestos-Manhattan, Inc., BRIDGEPORT, CONN.
RAYBESTOS-MANHATTAN, INC., Brake Lining • Brake Blocks • Brake Fluid • Clutch Facings • Industrial Rubber • Mechanical Packings • Asbestos Textiles • Engineered Plastics • Sintered Metal Products • Rubber Covered Equipment • Laundry Pads and Covers • Abrasive and Diamond Wheels • Industrial Adhesives • Bowling Balls

You need today's tools to



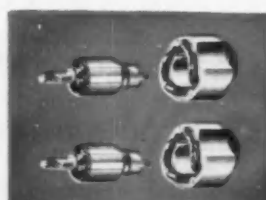
Black & Decker Air Chuck
with collet clamp compensates for Valve Stem wear—gives top accuracy—maximum speed.



Exclusive Auto-Flow Coolant Control
distributes the right amount of coolant right on the work. No external hoses to get in the way.

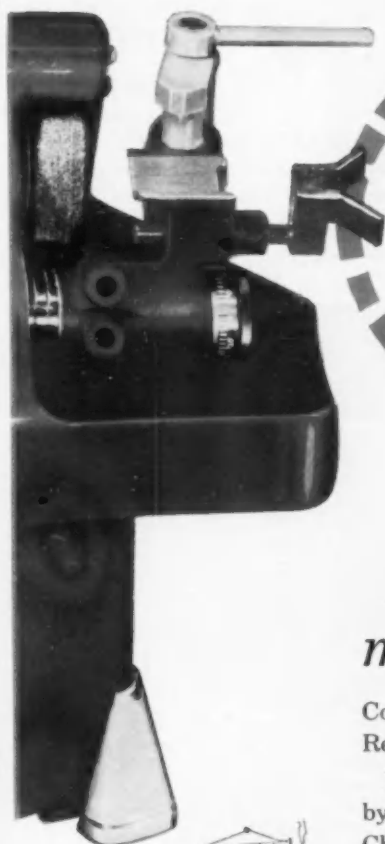


Micrometer Stem & Rocker Arm Grinding Attachment
right on the tool—swings in easily for stem grinding. No waste motion to slow work!



Black & Decker Two-Motor Drive
gives you smoothest power—constant speed for top accuracy, faster work!

service today's engines!



Put a modern
Black & Decker Valve Refacer
in your shop for as little
as \$13⁶⁹ a month!

Pays for itself with just one job a month — then pays you extra profits!

Compare this streamlined B&D Valve Refacer with your present tool:

Must you still chuck valve stems by hand—or do you have a B&D Air Chuck to speed your work?

Are all your accessories ready for action—or do you have to fumble in a drawer, then clamp them on?

How about coolant control? One central dial to set—or several knobs to turn, valves to open?

How's your tool's speed? Constant,

smooth—or variable on the valve face?

In a word, has your old valve refacer earned retirement?

A modern B&D Valve Refacer gives you an up-to-date shop—helps attract more customers and more profits. See for yourself how easy it is to own.

Call your nearby Black & Decker jobber or mail coupon to: THE BLACK & DECKER MFG. CO., Dept. 5404, Towson 4, Md. (In Canada: Brockville, Ontario.)



Any refacer less accurate
has earned retirement!

Leading Distributors Everywhere Sell



Black & Decker

Quality Electric Tools—Power-built for top performance

MAIL TODAY FOR FREE DEMONSTRATION

The Black & Decker Mfg. Co., Dept. 5404, Towson 4, Md.

Gentlemen:

- ☐ Please set up a free demonstration of your Valve Refacer.
☐ Mail me detailed literature.

Name

Company Title

Address

City Zone State

To assure top bearing accuracy we even make our own gages

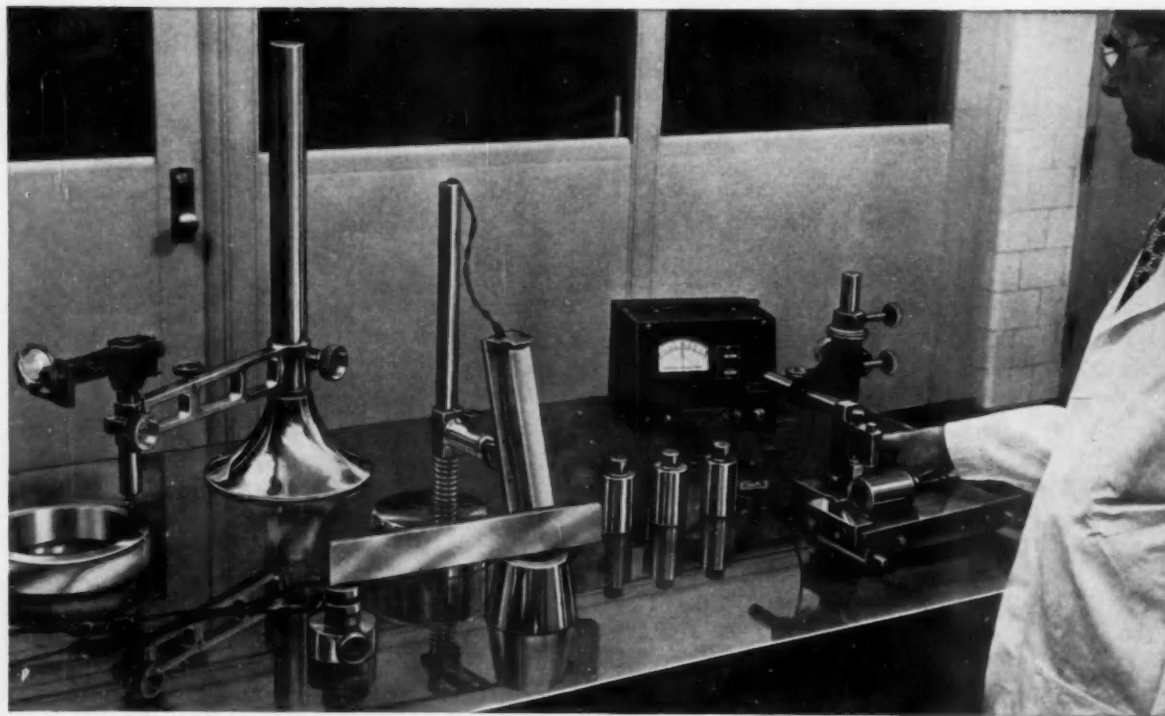
(Another reason why TIMKEN® bearings are first choice with truck manufacturers)

TO make the finest tapered roller bearings we need the most accurate gages and gage facilities. Some of our gages are so special we had to make them ourselves. For example, we made the huge surface plate shown below. Its finish is so perfect that you can't lift off a precision gage-block that has been pressed on; you have to *slide* it off. It helps us maintain top gage accuracy, and in turn, top bearing accuracy. It's another way we make Timken® bearings better.

Timken bearings are geometrically designed to roll

true. And they're made to live up to their design at every step, through rigid quality control. We even make our own steel—America's only bearing manufacturer that does. It all adds up to why Timken bearings are first choice with truck manufacturers.

It's worth your while to do as they do. Always specify Timken bearings . . . your best choice for replacement. Look for the trade-mark "TIMKEN". And send for the free, helpful booklet, "Timken Tapered Roller Bearings—Their Care and Maintenance". Write Dept. JCC-4, The Timken Roller Bearing Company, Canton 6, Ohio. Cable address: "TIMROSCO".



**SINCE THEY'RE BEST WHEN
THE TRUCK IS NEW, THEY'RE
BEST FOR REPLACEMENT, TOO!**



TIMKEN

TRADE-MARK REG. U. S. PAT. OFF.

TAPERED ROLLER BEARINGS ROLL THE LOAD

7 WAYS TO DECREASE DOWN-TIME...

FAN BELTS WITH NEOPRENE COVERS

resist high under-hood temperatures, abrasive road dirt, oil and grease. *Pre-stretching* prevents sagging and premature wear.

CLUTCH FACINGS

manufactured to the same industry-leading standards as Thermoid Brake Blocks and Heavy Duty Linings, provide smooth, positive engagement.



HEAVY DUTY HYDRAULIC BRAKE FLUID AND PARTS

withstand the toughest conditions. Thermoid HD Fluid meets or exceeds all SAE requirements. Brake Parts and cylinder assemblies are precision engineered for complete dependability and long life.



NEOPRENE-NYLON AIR BRAKE DIAPHRAGM

provides maximum protection against oil, abrasion, heat... stands up under flexing... resists "ballooning" Gives you more revenue miles between overhauls.



HEAVY DUTY BRAKE LININGS

compounded under Thermoid's exclusive Dry Mix Process, have a *density* that makes them wear longer in the most severe service.



BT NEOPRENE RADIATOR HOSE

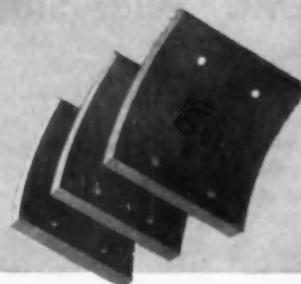
withstands 100° higher outside temperatures than ordinary hose... provides 4 times greater resistance to oil, grease and gas fumes.

Test these Thermoid products on the toughest job in your fleet!

Thermoid

Thermoid Company • Trenton, New Jersey

Brake Linings • Fan Belts • Radiator Hose • Hydraulic Brake Parts and Fluid • Car Mats • Clutch Facings • Thermoid Precision Process Equipment.



THERMOID BRAKE BLOCKS

are engineered to meet the most rigid stopping tests, while providing maximum mileage, regardless of heat or operating conditions.

1958 New Truck Registrations

STATE	Brockway	Chevrolet	Diamond T	Divco	Dodge	Ford	FWD	GMC	International	Kenworth	Mack	Peterbilt	Studebaker	White	Willis Jeep	Willis Truck	Misc. Dom.	Foreign	Total
Alabama		303	3	3	27	239		75	110	1	38		2	3	8	11		23	846
Arizona		172	4		30	149		53	35	6	3		4	6	5	10	2	15	494
Arkansas		547	1		84	400		157	152		10		11	6	3	0		3	1,362
California		1742	10	8	362	1622	2	281	420	7	26	8	38	61	30	61	2	500	5,190
Colorado		329	1	1	81	291	1	88	140	6	5	2	6	11	13	44	1	7	1,027
Connecticut	3	133	3	3	40	102	1	46	65		9		3	12	12	12	1	13	458
Delaware		52	3		14	52		9	40		15		3	2	3	3		4	200
District of Columbia		28		1	12	31		15	7		4					3		10	112
Florida		519	4	5	73	479	1	116	177		77		16	34	22	44	1	71	1,539
Georgia		463		2	14	353		36	95	1	10		3	8	3	9		18	1,015
Idaho		71			16	42		3	54	1								14	241
Illinois		890	41	16	174	826	10	186	517		35		21	37	14	37	9	55	2,857
Indiana		622	12	4	90	446		110	268		34		35	29	6	21	2	8	1,706
Iowa		389	10		57	304	1	62	243	1	11		2	9	5	5		11	1,090
Kansas		271	3		43	263		99	131	7	3		6	10		14		3	813
Kentucky		303	1	1	43	194		63	91		3		6	11	4	13		11	744
Louisiana		643	1		61	431		85	163	3	17		6	8	2	12		32	1,464
Maine		181			3	15		21	51		10		6	2	13	20		4	498
Maryland		171			1	48		61	92		16		5	13	6	6	1	8	593
Massachusetts	1	130			1	40		50	64		14		2	17	13	15	1	10	506
Michigan		503	6	3	134	528		120	161		20		12	27	10	27	6	54	1,611
Minnesota		373	4	1	58	295	4	71	170		2		12	3	3	14	1	24	1,035
Mississippi		295	1		17	163		37	89		1		4	1				1	609
Missouri		590	8		67	468		190	247	1	11		12	14	2	5		15	1,630
Montana		129			44	142		43	103	1	4		4	5	19			4	498
Nebraska		219	1		52	215		54	159	6	4		9	19	8	21		7	774
Nevada		25			4	30	1	5	9				2			4		4	84
New Hampshire		32		1	17	24		6	16		9			8	8	13		9	143
New Jersey	10	330	12	6	142	281	5	111	191		38		2	60	12	33		45	1,278
New Mexico		199	1		25	95		71	46		8		4	2	8	11		2	472
New York	25	636	8	19	207	670	1	219	590		66		15	75	50	143	15	206	2,945
North Carolina		366	3	1	49	346	1	90	203		38		10	32	3	14		16	1,172
North Dakota		95			24	96		28	113				6		2	2		3	369
Ohio	1	632	15	7	126	509	1	126	351		35		17	61		26	3	30	2,020
Oklahoma		354			32	227		72	91		15		4	4	1	5		6	811
Oregon		217		2	33	162	2	37	111	4	7	7	5	4	6	36	1	87	721
Pennsylvania	18	687	14	13	218	582		164	385		107		16	82	35	76	9	93	2,509
Rhode Island	3	36		2	11	58		25	23	1	14			4	1	5	1	15	199
South Carolina		185		1	20	104		34	63		9			5	1			6	428
South Dakota		164			29	174		51	163				9	2	10	20		2	626
Tennessee		381		1	69	237		84	113		18		4	11	6	7	2	10	903
Texas		2233	15		175	1519	2	362	556		48		33	68	33	37	2	40	5,121
Utah		62			22	62		41	53	15	2	3	3	4	4	4	3	6	284
Vermont		21	2		3	25		11	26		1		1	2	7	15		9	123
Virginia		292		3	51	230		59	123		23		6	42	4	14	1	26	874
Washington		199		7	179	179	1	64	96	9	3		5	4	4	13		38	615
West Virginia		159	1	1	36	153		48	75		9		6	10	25	12		12	549
Wisconsin		338	2	5	54	272	3	55	199	1	8		4	4	3	10	2	16	976
Wyoming		98	1		17	71		38	62	1	3		3	3	6	15		3	319
Total January, 1958	62	17649	193	122	3033	14616	40	3923	7522	72	845	21	390	610	419	976	66	1609	52,368
Total January, 1957	51	20820	308	203	3881	13296	51	5175	7539	61	1016	45	697	1253	506	1367	116	594	56,979

Source: R. L. Polk & Co.

GMC "Wide-Side" Pickups

THIS NEW GMC has a body which encloses the wheel wells to give added width in the cargo box. The new bodies are available in 6½ and 8-ft lengths with respective cubic capacities of 59.5 and 75.6 cu ft.

The added capacity has been achieved with a 4-lb weight increase in the smaller box and 22 lb in the 8-ft version.

The tailgate is wider and deeper than on conventional models and fits against metal finished rabbet surfaces to provide a tight body. The lower side panels have double-wall construction.

Floor boards are anchored to cross sills by steel skid strips with recessed bolts. The skid strips are recessed into floor boards and overlap the board edges.

A compression bar type tailgate locking mechanism is used on the "Wide-Side" series. A chain attached to one end of the latch is anchored at the other end to the rear face of the body side panel by



an adjustable bolt. With the tailgate closed, the latch is locked in place by fitting it over an eyebolt through which the chain "S" hook is inserted.

A rubber bumper fits over the latch and compresses against the tailgate to make a snug fit and eliminate rattles. Tailgate tension can be increased or decreased by adjusting the anchor bolt.

Keeps Safety Margins Up Maintenance Costs Down

More facts about SIMPLEX... and the first mechanical-type locking device easily kept in perfect operating condition

Greater Bearing Area

The Simplex forged steel jaw is flanged to grip the king-pin at the top and the bottom for greater bearing area and reduced king-pin bending leverage. Result? *Less wear.*



... and the lock that's **ALWAYS SAFE and sure!** One glance and you know if it's locked. When the safety latch is down it is a positive indicator that the wheel is in locked position, with all parts interlocking. And the Simplex is the easiest of all wheels to unlock—it's a simple one-handed operation that requires only a 14-pound pull.

Just a word about the lock construction itself. Any 5th wheel will wear... but with Simplex you can compensate for this wear quickly and easily by using the replacement "service" lock. In just minutes your Simplex will be good as new—and at low cost to you.



These are just two of the features that make Simplex 5th wheels the most dependable and economical your money can buy. Get the full story on the road-proved Simplex, the first really new 5th wheel built in years. Write today to: Simplex 5th Wheel, Hohman Ave. and Hoffman St., Hammond, Indiana.



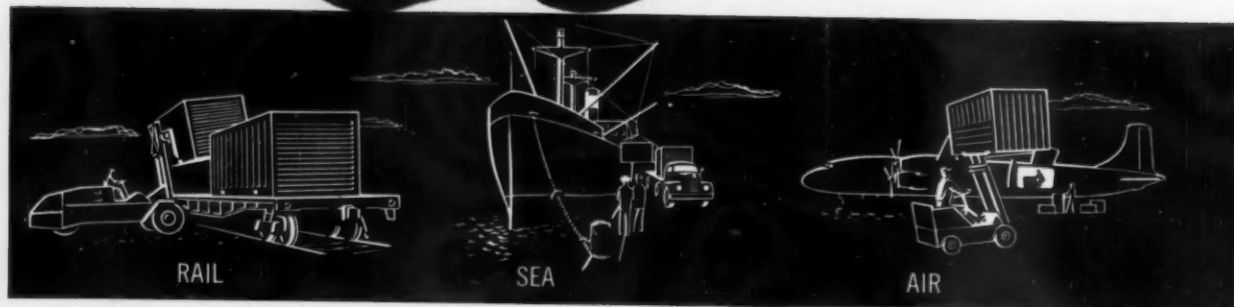
Simplex

5th wheel

A product of American Steel Foundries

CONTAINERIZE

Lower your cargo handling costs



with Grumman

with Aerobilt containers for truck, train, ship or plane

Grumman advances modern shipping container concept through aircraft design and production techniques. The new Aerobilt 17' aluminum container for marine, rail and platform semi-trailer gives you 30,000 payload and five-deep stacking fully loaded. The unit weighs less than 2000 lbs. including corner hoisting, fork lifting and locking provisions. Unique weatherproof doors at both ends for straight through cargo loading, roll up on the outside leaving 920 cubic feet of unobstructed area inside. Aircraft monocoque construction of corrosion resistant high-strength aluminum alloy assures minimum weight, maximum ruggedness and years of maintenance-free service.

Let Grumman, with 28 years of aircraft experience, custom-design, service-test and produce containers to fit your present and future shipping needs for land, sea or air. For complete information and specifications write: Mr. George M. Skurla, Chief Engineer, Aerobilt Bodies, Inc., Athens, New York.



AEROBILT BODIES INC., ATHENS, NEW YORK

A SUBSIDIARY OF GRUMMAN AIRCRAFT ENGINEERING CORPORATION



CHECK THE SPECS

Maybe the boys shown here could make a good guess at the lady's vital statistics. And even if their estimates were out by a tenth of an inch or so, it would make no never-mind. But they're playing it safe and checking the specs, just to be sure.

Now everybody knows it's more fun to check a gal's dimensions than to do the same job on a rig. But, fun or not, ya gotta check the specs if you're gonna do the job right. Guess-timates are no good when it comes to spark plug gap, point setting, valve clearance, etc. Sure, you've got some lee-way in the specs, but you've gotta know what the spec is before you can know you're within tolerance limits.

Maybe you're the one-in-a-million who can trust his memory for all specifications on all your jobs. If you are, better hit the boss for a raise. If not, you'd better get the habit of looking them up in the book before you make any adjustments. It will save doing the job over again eventually, and will help keep the rigs out on the road where they belong.



N. B. Waxler, Maintenance Supervisor, National Automotive Fibres, is shown with Jim Compton, Cooper Rep., as they set up "the record" for two new Cooper Road-Master Extra Mile truck tires.

Cooper Road-Masters average 125,000 miles, cut truck tire costs below 1 mill per mile

National Automotive Fibres uses 30 pieces of equipment to haul sixteen (16) ton loads of semi-fabricated door panels and carpet to car manufacturers and their assembly points all over the country.

Deliveries must comply with production line timing. Trucks must almost always roll at maximum allowable speeds from plants located in Ohio, Michigan and New York. Yearly mileage tops the 1 million mark. Tire cost is an important factor in keeping National Automotive Fibres competitive. That is why this

automotive supplier's truck fleet is equipped with Cooper Road-Master Extra Mile tires. These tires average 125,000 original miles on drive wheels, deliver even higher mileage on front and trailer wheels. Cooper Road-Master Extra Mile tires have cut costs below 1 mill per mile for this operator.

\$1 Million Marvel Pays-Off

The industry's newest and most advanced nylon cord processing mill is one reason why Cooper Road-Master tires

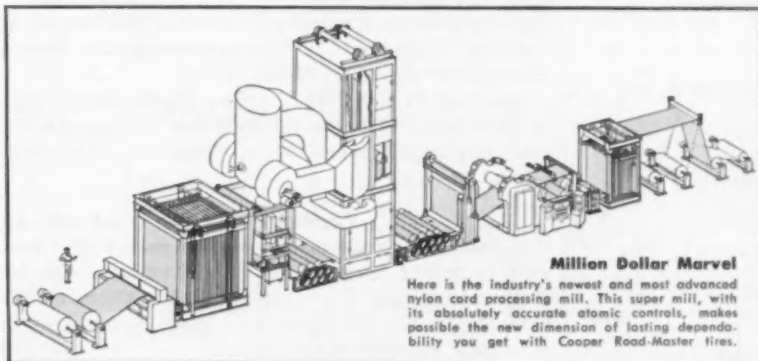
deliver more mileage at lower cost for National Automotive Fibres.

Aptly named the million dollar marvel, this super mill adds the new dimension of lasting dependability to nylon and rubber. The pay-off for truck operators like yourself is a practically damage-proof tire body that delivers phenomenal original mileage, up to 4 and 5 bonus recaps.

And remember: The new dimension of lasting dependability you get with Cooper Road-Masters is in addition to the extra protection made possible by Cooper Shock-Guard construction.

Call and Save

The advantages of lower truck tire costs and higher payload profits are as near as your telephone. Call your Cooper truck tire dealer, or write us for full details about Cooper Road-Master tires. Both nylon and rayon types available in a complete range of prices. Cooper Tire & Rubber Co., Findlay, Ohio.





Reo Offers 8 New Tandems for '58

**Designed for heavy front axle loadings,
they range from 35,000 to 52,000 lb GVW**

REO'S newly announced "C" Series tandems for 1958 include a total of eight base models. Features are

- Smooth, contour fenders divorced from the cab.
- Oversize grill and radiator for maximum cooling.
- Flat top fenders and center-hinged hood for engine accessibility.
- One-piece curved windshield.
- Large running boards with non-skid deck plate for extra safety.
- Three rib, high strength bumper extending the full width of fenders.

- Dual headlights for safer night driving.
- Front-of-bumper to back-of-cab dimension of 101½ in.

GVW's for the "C" Series range from 35,000 to 52,000 lb. The C-330 is the smallest of the new tandems and is rated at 35,000 lb. It includes a 7000-lb front axle with 9000 and 11,000-lb axles available. The rear axle is Eaton's 28M tandem with a capacity of 28,000 lb.

The C-430 is the successor to Reo's F-506 line. This unit is rated at 42,000 lb. The C-436 is the replacement for the F-506M which continues the heavy front axle loading design. This unit permits front axle loadings of 14,000 lb and increases legal payloads up to an extra two yards of concrete.

The C-440 is an all-wheel drive 6 x 6. The C-530 and C-536 are larger capacity units adaptable for those states permitting heavier legal axle loadings. These vehicles include a choice of three tandem rear axles and have full air brakes as standard equipment. GVW's—depending on axles—range from 46,000 to 52,000 lb.

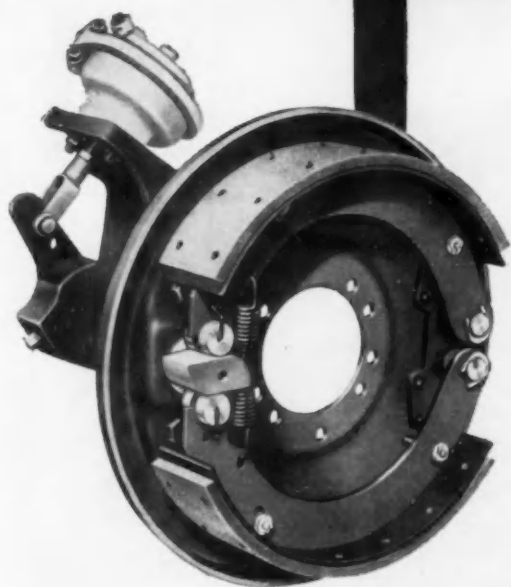
The C-430D and C-530D utilize similar components to counterpart gasoline versions but incorporate the Cummins JT-6-B turbocharged diesel for their power plant.

Positioning of the front axle on these trucks is such that a greater part of the payload is moved forward. This positioning, with its shorter wheelbase for a given CA dimension, results not only in heavier front axle loadings but also in extremely maneuverable units.

Reo C Series Engine Availability

Model No.	Engine				
	331 OA	331 OA LPG ¹	OH 170	OH 180 LPG ¹	JT-6-B ²
C-330	S	O	O	O	
C-430	O	O	S	O	
C-430-D					S
C-436	O	O	S	O	
C-440	O	O	S	O	
C-530			S	O	
C-530-D					S
C-536			S	O	

S—Standard. O—Optional. ¹—LP Gas Engine. ²—Diesel.



"T" BRAKE

...an economical air brake
designed for a
variety of automotive
applications

If it moves...

Timken-Detroit Brakes can stop it!

Outstanding control for a modest investment is offered by the new "T" air brake. Ruggedly-built, dependable, and capable of long, trouble-free service, its economy is achieved principally through simpler design and improved manufacturing methods.

Air-actuated, the "T" Brake operates through a precision-forged, one-piece camshaft. The cam design provides a constant, equal rate of lift to both shoes. The entire camshaft is heat treated for maximum strength.

Fabricated steel brake shoes combine strength with lightness . . . hardened spool type cam rollers used with single-web, fabricated shoes provide perfect alignment with camhead. The roller, mounted in an open-type support, is always free to rotate. Brake linings are available up to 1/2" in thickness.

Other features include: quick, one-point adjustment; air chamber and camshaft brackets mounted on backing plate in one compact assembly; wide range of sizes and capacities.

Another Product of...

**Rockwell Spring
and Axle Co.**



*For every industrial, agricultural or automotive
application where braking is required!*

BRAKE DIVISION
Ashtabula, Ohio



Low cost all along the line in this efficient cab-forward diesel tractor. Cummins NH-180 diesel engine assures economy on long pulls. Ninety inches BBC. Universal application for longer trailers and high cube loads. Meets bridge formula requirements. Diesel power options to 220 hp. in applications — including three-axle jobs — to 70,000 lbs. GCW.



Westerner Multi-Million-Mile tilt-cab diesel for low rolling and maintenance cost. Light chassis weights speed turn-arounds, add bigger revenues per rig. Cab design cuts service time. 180 hp. Cummins NH-180 engine gives satisfactory power throughout run. Cummins engines available in applications from 55,000 to 76,000 lbs. GCW.



Built in the west for western haulers. High-torque 180 hp. Cummins NH-180 diesel in this conventional model hustles any load without power loss at any altitude or on any pull. Exclusive steering and stable front-end make for sure handling. Diesel power options from 175 to 335 hp. in applications up to 70,000 lbs. GCW.



In the 48,000 lb. GCW range this gas-powered cab-forward model pulls increased ton-loads. Easier handling — 90-in. BBC. Sixteen inches less overall length than conventional units with like cubic capacities. Standard "six" develops high torque and more usable horsepower at lower rpm.—you pay no more for extra payload power.

INTERNATIONAL TRUCKS



Only 48-in. bumper-to-back-of-cab. New INTERNATIONAL Sightliner hauls more legal payload than any other truck in its class coast to coast. High-low vision with three windshields. Pushbutton hydraulic lift tilts cab in seconds. Traffic-pacing gasoline or LPG True-Truck V-8 engines offer up to 549 cu. in. displacements in applications to 65,000 lbs. GCW.

Which is best for you?

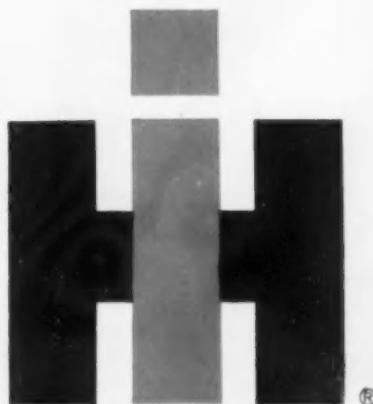
Wherever and whatever you haul there's an International Truck built to handle it best in the world's most complete truck line!

Proof: On these two pages!

Details: At your International Dealer!

Payoff: On the road and at the bank!

cost least to own!



INTERNATIONAL HARVESTER COMPANY, CHICAGO
Motor Trucks • Crawler Tractors
Construction Equipment • McCormick®
Farm Equipment and Farmall® Tractors

Standard Oil research develops new motor oil formula,
gives more heavy-duty protection

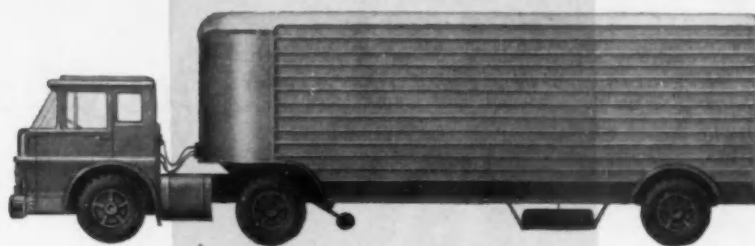


NEW

STANOLUBE

*prevents
bronze wrist-pin bushing corrosion
in
severe service*





Researchers at Standard Oil have developed new formulas for **STANOLUBE** Motor Oils. These new motor oils now eliminate corrosion of bronze wrist-pin bushings. This is another example of how research keeps **STANOLUBE** Motor Oils ahead of the demands imposed on lube oils by the newer, higher horsepower engines.

Laboratory and field tests prove that new **STANOLUBE** Motor Oils have superior resistance to deterioration caused by bronze and other copper alloys. They retain their ability to protect against oxidation and wear. They also protect against both ring sticking and cam follower wear.

STANOLUBE Motor Oils provide superior service over a wide range of operating conditions. They are refined from highest-quality base stocks. Special additives developed by Standard Oil research retard oil oxidation, minimize formation of piston and ring deposits, prevent formation of excessive varnish and sludge, and prevent corrosive attack on bearing metals.

Give your equipment this extra protection. Get the facts about **STANOLUBE** Motor Oils from your Standard Oil automotive lubrication specialist. There's one near you in any of the 15 Midwest or Rocky Mountain states. Or write **Standard Oil Company (Indiana)**, 910 South Michigan Ave., Chicago 80, Illinois.

Quick facts about
STANOLUBE Motor Oil

- Refined from highest-quality, solvent-extracted base stocks.
- Contain special additives that prevent bearing and bronze wrist-pin bushing corrosion, reduce piston ring varnish and keep rings free to seal against blow-by.
- Contain still other additives that reduce wear on heavily stressed parts.

You expect more from



and get it!

SAFETY

at your fingertips



Losses like this can be prevented by using C-H Master Disconnect Switches.

No. 24016 or No. 24017 cuts off battery and generator power on moving or standing vehicles.

No. 2484 or No. 2484-A cuts off battery power only on standing and moving vehicles.

For more information send for Form D-177 Rev., or see your local distributor for other safety designed electrical equipment.

A flip of the lever on this Master Disconnect Switch puts safety at your fingertips. Designed to cut off power at its source (battery and/or generator), the Manual Master Disconnect Switch prevents:

FIRE

Disconnects electrical circuits to prevent fires from frayed or damaged wires and short circuits.

TAMPERING AND THEFT

Lowers insurance rates by preventing such tamperings as jumping wires.

BATTERY RUNDOWN

Kills that "lights left on" drain.

UNDERWRITERS' APPROVAL

Basic switch is Underwriters' Laboratories approved.



COLE-HERSEE

Over 40 Years of Consistently Better Products

20 OLD COLONY AVENUE, BOSTON 27, MASS.



F. Wills, road builder, writes to Diamond T

Gentlemen:

I am the proud owner of four Diamond T dump trucks, Model 730, XL450 motor, dual drive built up to Diamond T specifications. The Model 730 truck does a fine job in the field on heavy construction. Our net payload is $13\frac{1}{2}$ ton, legal weight on the highway.

The low under-drive gear is ideal for soft spongy jobs, such as new road work during the wet winter months.

These trucks are geared for top speed of 50 miles per hour and some of my drivers who have been with me for ten years or more, say this is the finest

gas rig we have ever had in the yard. To date we have put better than 30,000 miles on two of these trucks and have never had them in the shop except for points and plugs. We service our trucks regularly as we feel that regular servicing is half the life of equipment.

At present I have fifteen or twenty pieces of equipment of other makes but if the price stays right it will be Diamond T for me from now on.

F. WILLS, President, F. WILLS CORPORATION
Antioch, California

Thank you, Mr. Wills. The price will always be right!

Maybe you'd like performance like Mr. Wills gets. See your Diamond T dealer.

DIAMOND T TRUCKS

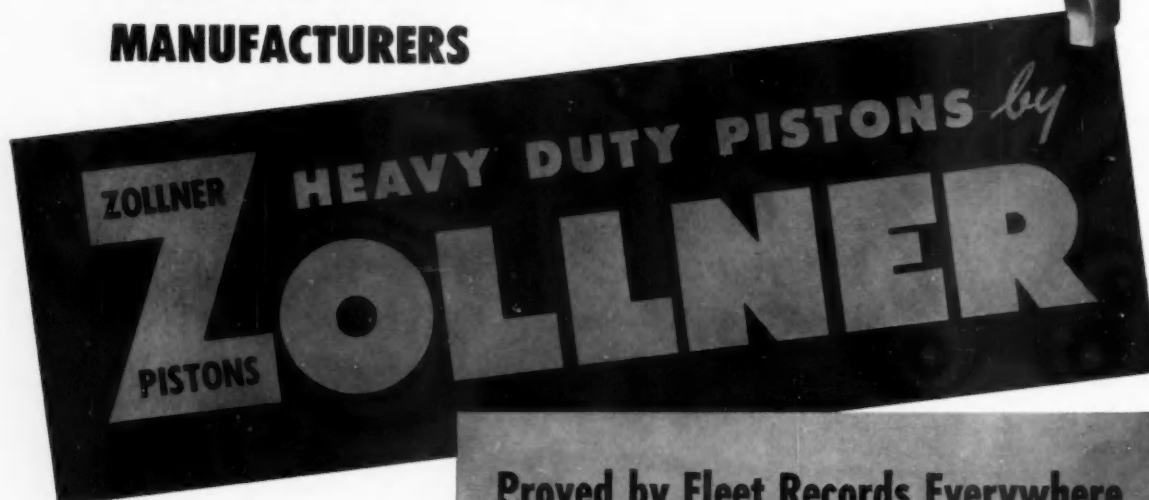
DIAMOND T MOTOR TRUCK COMPANY, CHICAGO, Division of THE WHITE MOTOR COMPANY



*The Diamond
is for Quality*

Original Equipment **PISTON**

**OF OVER 70% OF ALL
TRUCK AND BUS
MANUFACTURERS**



**Proved by Fleet Records Everywhere
HIGHEST ENGINE PERFORMANCE
LOWEST MAINTENANCE COST**

**For reconditioning
Always Specify the
"ENGINEER APPROVED" PISTON**

Expertly engineered pistons make a big difference in engine performance—and operating cost. That's why it's always best to insist on Zollner "Engineer-Approved" Pistons when reconditioning your engines. The big majority of engine manufacturers work hand-in-hand with Zollner engineers in the development of pistons best suited to heavy-duty use. Over 70% of all makes of trucks and buses are Zollner equipped — and have been for years. Only when you use Zollner can you be sure that your pistons are expertly designed and precision-made to individual engine specification for utmost performance and economy of operation.

ZOLLNER CORPORATION • FORT WAYNE, INDIANA

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1

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TRUCK DATA



AUTOCAR

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)
White 490A	531	6	4 $\frac{3}{4}$ x 5
Cummins JT-6	401	6	4 $\frac{1}{8}$ x 5
Cummins NHB	743	6	5 $\frac{1}{8}$ x 6
Cummins HRB	743	6	5 $\frac{1}{8}$ x 6

Oil Pressure

(At governed speed)

White 490A	40-60 psi
Cummins JT-6	30-60 psi
Cummins NHB, HRB	30-50 psi

Compression Pressure

White 490A	110-120 psi @ cranking speed
------------	------------------------------

IGNITION

Cam Angle (Dwell)

White 490A	31-37 deg
------------	-----------

Breaker Point Gap

White 490A	.022 in.
------------	----------

Spark Occurs

(Degrees Before Top Center)

White 490A	6 deg
------------	-------

SPARK PLUGS

Make & Type

White 490A	CH D-10
------------	---------

Size

White 490A	18 mm
------------	-------

Gap

White 490A	.025 in.
------------	----------

Torque

White 490A	25 lb-ft
------------	----------

VALVES

Operating Tappet Clearance

White 490A zero
Cummins engines (with oil temperature @ 140 deg)

JT-6	Inlet: .015 in. Exhaust: .025 in.
NHB	Inlet: .014 in. Exhaust: .027 in.
HRB	Inlet: .014 in. Exhaust: .022 in.

Seat Angle

White 490A...Inlet and Exhaust: 45 deg
Cummins engines...Inlet and Exhaust: 30 deg

TENSIONS

Cylinder Head Bolt

White 490A	105-110 lb-ft
Cum JT-6	11/16: 240-250 lb-ft 3/4: 380-400 lb-ft
Cum NHB, HRB	430-450 lb-ft

VALVE SPRINGS

Free Length

White 490A	2.531 in.
Cum JT-6	2.539 in.
Cum NHB	3.313 in.
Cum HRB	3.484 in.

Pressure

White 490A	177-187 lb compressed to 1.612 in.
Cum JT-6	122 lb compressed to 1.673 in.
Cum NHB	104-114 lb compressed to 1 27/32 in.
Cum HRB	179 $\frac{1}{2}$ -198 $\frac{1}{2}$ lb compressed to 2 3/16 in.

BATTERY

Amp-Hour Capacity

Models with 490A & JT-6	120
All others	150

Plates Per Cell

Models with 490A & JT-6	17
All others	21

SAE Group No.

Models with 490A & JT-6	2
All others	4

Terminal Grounded

All models	Pos
------------	-----

FRONT END

Toe-In

All models	0- $\frac{1}{4}$ deg
------------	----------------------

Camber

All models	1 deg
------------	-------

Caster

Truck Model

C65 series	- $\frac{3}{4}$ -+ $\frac{3}{4}$ deg
C9564	-1-+1 deg
C6764-OH	- $\frac{3}{4}$ -+ $\frac{3}{4}$ deg
Other C-series	-1-+1 deg
DC102, DC103T	0-2 deg
DCU75T	-1-+1 deg
DC87D-OH	-1-+1 deg
DC9564	-1-+1 deg
DC9764-OH	-1-+1 deg
DC103D-OH	-1-+1 deg
DC10464S-OH	-1-+1 deg
DC20364S-OH	-1-+1 deg
Other DC-series	- $\frac{3}{4}$ -+ $\frac{3}{4}$ deg

King Pin Slant

Truck Model

C65 series	5 $\frac{1}{2}$ deg
C6764-OH	5 $\frac{1}{2}$ deg
DC102, DC102T	5 $\frac{1}{2}$ deg
DC20364S-OH	0 deg
All others	8 deg

CAPACITIES

Crankcase

White 490A	16 qt
Cum PT-6	16 qt
Cum NHB, HRB	28 qt

Transmission

Fuller:

6352, 6453	17 pt
R-46	19 pt
5C-72, 5C-720	24 pt
R-96, R-960	31 pt
R-95C, R-950C	32 pt

Spicer:

4-speed	16 pt
5-speed	24 pt
10CA-, 10CB	31 pt
10A-, 10B1120	35 pt
All auxiliaries	12 pt

Rear Axle

TK, G, GH	18 pt
FT	25 pt

Timken Tandems:

(Capacity of each axle)

SQD, SQDD, SRD, SRDD	22 pt
SLD, SLDD, SFD-4742..	25 pt
SFD, SFDD-4600..Front:	28 pt
Rear:	24 pt

Two-Speed

Q300	35 pt
R300	40 pt
79746 (Double reduction)	24 pt

Worm Drive

SQW (each axle)	26 pt
SW-3456	48 pt
SW-456	56 pt
SW-3458A	66 pt

Cooling System

Models with:

White 490A	39 qt
Cum JT-6	31 qt
Cum HRB, HRFB	37 qt
Other Cummins engines.	40 qt

LUBRICATION

Crankcase

White 490A...Use SAE 30 in Summer, SAE 20 in Winter. All Cummins engines...Above 90 deg use SAE 30; Between 32 and 90 deg use SAE 20; Below 32 deg use SAE 10W.

Transmission

Fuller 6352, 645 and Spicer 4 and 5-speed...Use SAE 50 engine oil all year.

Auxiliaries...Use SAE 50 engine oil all year.

All others...Use SAE 90 straight mineral oil all year.

Rear Axle

SQW...Use SAE 140 straight mineral oil all year.

G, GH, FT, TK...Use SAE 90 Extreme Pressure lubricant all year.

All others...Use SAE 140 Extreme Pressure lubricant all year.

FREIGHTLINER

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)
Hall-Scott 1091 B & G	1090	6	5 $\frac{3}{4}$ x 7
Hall-Scott 590 B & G	590	6	5 x 5
Buda 6 DAS-844	844	6	5 $\frac{1}{4}$ x 6 $\frac{1}{2}$
Buda 6 DA-779	779	6	5 $\frac{1}{4}$ x 6
Cummins JT-6	401	6	4 $\frac{1}{8}$ x 5
Cummins NHB	743	6	5 $\frac{1}{8}$ x 5
Cummins NHH, NHHT	743	6	5 $\frac{1}{8}$ x 5
Cummins NT, NTO	743	6	5 $\frac{1}{8}$ x 5
Cummins NRT, NRTO	743	6	5 $\frac{1}{8}$ x 5

Oil Pressure

H-S 1091 B & G...	10 psi @ 350 rpm
H-S 590 B & G...	60 psi @ 2800 rpm
Buda engines...	40 psi @ 1400 rpm
Cummins JT-6...	30-60 psi @ governed speed
Other Cummins engines...	30-50 psi @ governed speed

IGNITION

Cam Angle

H-S 1091 B & G...	34-37 deg
H-S 590 B & G...	31-37 deg

Breaker Point Gap

H-S 1091 B & G.....	.021 in.
H-S 590 B & G.....	.022 in.

Spark Occurs

(Degrees Before Top Center)

H-S 1091 B.....	8 deg
H-S 1091 G.....	2 deg
H-S 590 B.....	10 deg
H-S 590 G.....	5 deg

SPARK PLUGS

Make & Type

H-S 1091 B...Inlet side: CH 6 Com; Exhaust side: CH 4 Com	
H-S 1091 G...Inlet side: CH 10 Com; Exhaust side: CH 6 Com	
H-S 590 B & G.....	CH J-5

Size

H-S 1091 B & G.....	18 mm
H-S 590 B & G.....	14 mm

Gap

H-S 1091 B & G...	.018-.023 in.
H-S 590 B.....	.015 in.
H-S 590 G.....	.025 in.
(TURN TO NEXT PAGE, PLEASE)	

TRUCK DATA

FREIGHTLINER

Continued from Page 73

VALVES

Operating Tappet Clearance

H-S 1091 B & G...	Inlet: .021 in.
	Exhaust: .031 in.
H-S 590 B & G...	
	Inlet & Exhaust: .022 in.
Buda engines (with water temperature @ 160 deg)	
	Inlet: .012 in.
	Exhaust: .015 in.
Cummins engines... (with oil temperature @ 140 deg)	
	Inlet: .014 in.
	Exhaust: .027 in.

Seat Angle

H-S 1091 G & B...	
	Inlet: 30 deg
	Exhaust: 45 deg
H-S 590 G & B...	
	Inlet & Exhaust: 45 deg
Buda engines...	
	Inlet & Exhaust: 45 deg
Cummins engines...	
	Inlet & Exhaust: 30 deg

Face Angle

H-S 1091 B & G...	
	Inlet: 30 deg
	Exhaust: 44½-44¾ deg
H-S 590 B & G...	
	Inlet: 45¼ deg
	Exhaust: 45 deg

TENSIONS

Cylinder Head Bolt

H-S 1091 B & G...	Large: 230-250 lb-ft; Small: 30-40 lb-ft
H-S 590 B & G...	¾-18 thread: 140-160 lb-ft; 7/16-20 thread: 30-40 lb-ft
Buda engines...	
	¾ in.: 60-70 lb-ft
	7/16 in.: 75-85 lb-ft
	½ in.: 95-105 lb-ft
	9/16 in.: 125-135 lb-ft
	⅝ in.: 150-160 lb-ft

Cum JT-6...	
	11/16 in.: 240-250 lb-ft
	¾ in.: 380-400 lb-ft
Other Cum engines...	
	430-450 lb-ft

VALVE SPRINGS

Pressure

H-S 1091 B & G...	
	Inner: 105 lb @ 1 15/16 in.
	Outer: 138 lb @ 2 in.
H-S 590 B & G...	
	Inner: 80 lb @ 1¾ in.
	Outer: 144 lb @ 1 13/16 in.
Buda engines...	200-210 lb @ 2 13/64 in.
Cummins JT-6...	
	122 lb @ 1.673 in.
Other Cummins engines...	
	104-114 lb @ 1 27/32 in.

Free Length

Buda engines	3.250 in.
Cummins JT-6	2.539 in.
Other Cummins engines	3.313 in.

BATTERY

Amp-Hour Capacity

All models	152
------------	-----

Plates Per Cell

All models	19
------------	----

SAE Group No.

All models	4
------------	---

Terminal Grounded

All models	Pos
------------	-----

FRONT END

Toe-In

All models	⅛ in.
------------	-------

Camber

4 x 4 models	0 deg
All others	1 deg

Caster

(Specification is for left. Right should be 2/10-½ deg higher)

Truck wheelbase

115-150 in.	2.7-3.2 deg
150-200 in.	2.2-2.7 deg
200 in. up	1.7-2.2 deg
4 x 4 models	5 -6 deg

King Pin Slant

WF 5844 T	0 deg
All others	5 deg

CAPACITIES

Crankcase

H-S 1091 G & B...	16 qt
H-S 590 G & B...	14 qt
Buda engines...	
	Highway models: 24 qt
	Off-highway models: 28 qt

Transmission

Fuller:	
4A-86, 4B-86	17 pt
5C-72, 5C-720	26 pt
5A-1120, R-95, R-950	32 pt
R-96, R-960	33 pt
Spicer:	
8041 & 45, 8241 & 45	16 pt
8051 & 55, 8251 & 55	24 pt
8125	28 pt
Fuller auxiliaries	13 pt
Spicer auxiliaries	12 pt

Rear Axle

Timken:	
F-233	12 pt
QT-300	29 pt
R-100, R-140	30 pt
QT-140	31 pt
R-200	36 pt
U-300	39 pt
R-330	44 pt
R-230	45 pt
U-200	58 pt
Autocar GG	18 pt
Eaton 22501	32 pt
White 89C, 189C	22 pt
White 134C	26 pt

Dual Drive

Freightliner	Front: 32 pt
	Rear: 32 pt
Timken 3458	Front: 32 pt
	Rear: 32 pt
Timken SQW	Front: 40 pt
	Rear: 40 pt
Other Timken	Front: 28 pt
	Rear: 28 pt

Make Fruehauf Your I.C.C. Safety Station

—and save
down-time and
money!

Your nearby Fruehauf Branch has every modern facility for the biggest or smallest Trailer repair or maintenance job, from insulation installation and tandem conversions through painting and aluminum brightening. Further, convenient terms are available on major service jobs if needed.

Fruehauf prices are at an all-time low on operating parts such as brakes, signals, horns, bearings, and flares, useable with *all* makes of Trailers.

Stocks in all Branches are always *current*—because you can't delay safety till later.

Your *entire* fleet maintenance problem can be put safely in Fruehauf's hands if you desire. Fruehauf offers low-cost inspections and year-round, comprehensive service on *all units* in your fleet at *all points* on your route. Even tractor inspection and cab repairs are included in such arrangements—assuring you of full I.C.C. compliance, minimum down-time, and steadier fleet earnings.

Send for more detailed facts on dollar-saving Fruehauf service and maintenance plans *before* needless, costly expenses develop.



Thorough, economical, periodic I.C.C. inspections



All-time low prices for operating parts replacement

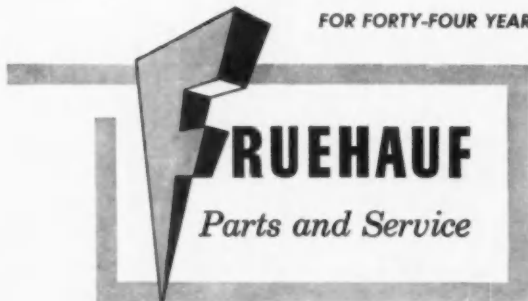


Convenient terms on conversions and major repairs



"Worry-free" fleet maintenance arrangements

FOR FORTY-FOUR YEARS—MORE FRUEHAUF TRAILERS ON THE ROAD THAN ANY OTHER MAKE!



World's Largest Builder of Truck-Trailers
FRUEHAUF TRAILER COMPANY
10940 Harper Avenue • Detroit 32, Michigan
SEND FULL DETAILS ON FRUEHAUF YEAR-ROUND
MAINTENANCE AND INSPECTION PLANS.

NAME _____
COMPANY _____
ADDRESS _____
CITY _____ STATE _____

TRUCK DATA

BROCKWAY

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)	
40B (Con M6330)	330	6	4	x 4 3/8
41BD (Con M6363)	363	6	4	x 4 13/16
42BD (Con B6427)	427	6	4 5/16	x 4 7/8
46BD (Con R6513)	513	6	4 1/2	x 5 3/8
48BD (Con R6572)	572	6	4 3/4	x 5 3/8
46FD (Con R6513)	513	6	4 1/2	x 5 3/8
48FD (Con R6572)	572	6	4 3/4	x 5 3/8

Oil Pressure

All engines...
55-65 psi @ 2000 rpm

Compression Pressure

(At cranking speed)

46BD, 46FD	102-108 psi
48BD, 48FD	108-112 psi
Others	110-115 psi

IGNITION

Breaker Point Gap

All engines022 in.

Cam Angle (Dwell)

All engines 39 deg

Spark Occurs

(Degrees Before Top Center)

40B	9 deg
41BD	4 deg
42BD	2 deg
46BD & FD, 48 BD & FD	5 deg

VALVES

Operating Tappet Clearance

40B	Inlet: .020 in.	Exhaust: .022 in.
41BD, 42BD	Inlet: .016 in.	Exhaust: .024 in.
Others	Inlet: .020 in.	Exhaust: .024 in.

Seat Angle

42BD	Inlet: 15 deg	Exhaust: 45 deg
Others	Inlet: 30 deg	Exhaust: 45 deg

Face Angle

42BD	Inlet: 15 deg	Exhaust: 44 deg
Others	Inlet: 30 deg	Exhaust: 44 deg

VALVE SPRINGS

Pressure

(Valve Open)

40B, 41BD	115-123 lb @ 1.520 in.
42BD	129.7-143.7 lb @ 1.226 in.
46BD & FD, 48 BD & FD	Inner: 86- 94 lb @ 1.367 in.
	Outer: 153-167 lb @ 1.617 in.

TENSIONS

Cylinder Head Bolt

40B, 41 & 42BD	70- 75 lb-ft
Others	100-110 lb-ft

SPARK PLUGS

Make & Type

40B	CH 8 Com
Others	CH D-10

Size

All engines 18 mm

Gap

All engines025 in.

BATTERY

Amp-Hour Capacity

46BD & FD	150
48BD & FD (2 batteries)	120
Other engines	120

Plates Per Cell

46BD & FD	19
48BD & FD (2 batteries)	17
Other engines	17

Terminal Grounded

All models Pos

FRONT END

Toe-In

All models 1/16-1/8 in.

Camber

All models 1 deg

Caster

All models 1/2-1 1/2 deg

King Pin Slant

Truck Model

128WX, 146WX, 148WD	5 1/2 deg
147W, 147WL, 148SLD	5 1/2 deg
155W	5 1/2 deg
260LD, 260WLD	8 deg
260SQ, 260SF	8 deg
Others	0 deg

CAPACITIES

Crankcase

40B, 41BD	7 qt
42BD	8 qt
46BD & FD, 48BD & FD	14 qt

Transmission

Truck Model

128WX, 146WX	11 pt
147W, 147WL	11 pt
148-155 series	16 pt
Others	24 pt

Rear Axle

Truck Model

128WX, 153SL, 155W	20 pt
--------------------	-------

(TURN TO PAGE 78, PLEASE)

MINER

TUBULAR BAR TYPE

DROP-FORGED

Door Fasteners

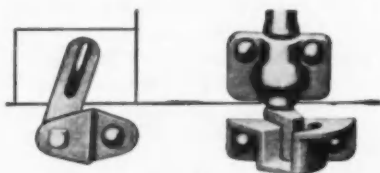
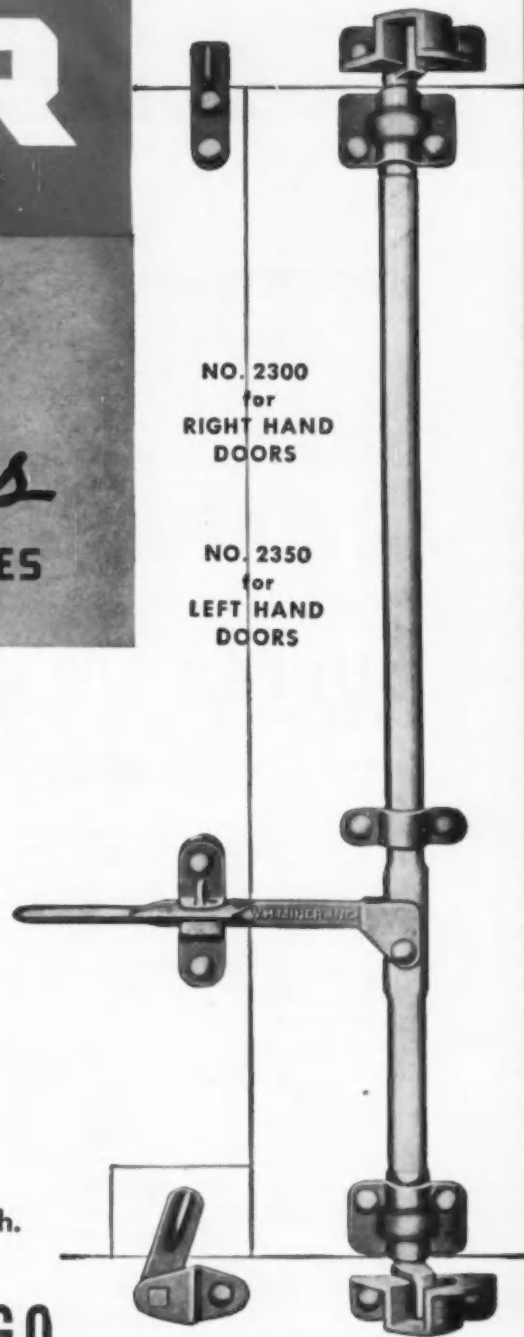
FOR TRUCK AND TRAILER BODIES

1. DROP FORGED for greater strength.
2. OVAL LOCKING BAR for greater rigidity.
3. SPECIAL CARBON STEELS for greater endurance.
4. DEEPER KEEPERS for positive security of load.
5. FEWER PARTS for lower maintenance costs.
6. SIMPLIFIED ASSEMBLY for lower cost of application.
7. SMOOTH FINISH for de luxe appearance.
8. LIMITING STOP to prevent handle from marring finish.

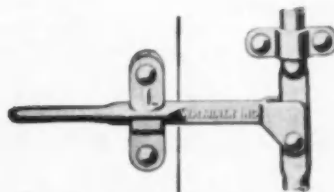
W. H. MINER, INC., CHICAGO

NO. 2300
for
RIGHT HAND
DOORS

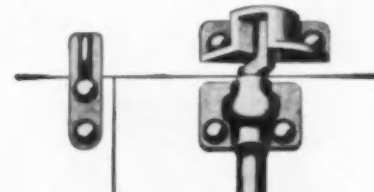
NO. 2350
for
LEFT HAND
DOORS



The longer bottom lock bar end, plus greater depth of lower keeper, provides a more secure locking feature and prevents disengagement of the cam from the keeper pocket.



The name "Miner" on the handle is a symbol of quality and excellence in design, backed by nearly 60 years of manufacturing experience in door locking devices.



Greater security is assured by providing a deeper pocket in the upper keeper and a longer cam on the upper lock bar end.

TRUCK DATA

BROCKWAY

Continued from Page 76

254W, 256W	20 pt
146 WX, 148WD	31 pt
147W, 147WL	31 pt
260WD	32 pt
255W, 258W	35 pt
153SL	37 pt

254W, 256W	39 pt
260WLD	39 pt
148SLD (each axle)....	20 pt
153SQ (each axle).....	23 pt
260SQ (each axle).....	23 pt
260SF (each axle).....	28 pt

Cooling System

Models with...

40B	25 qt
41BD	26 qt

42BD	31-33 qt
46 & 48 BD & FD....	40 qt

LUBRICATION

Crankcase

All engines...Use SAE 30 engine oil all year.

Transmission

T-98...Use SAE 90 straight mineral gear oil all year.

All others...Use straight mineral gear oil. Use SAE 140 in Summer, SAE 90 in Winter.

Rear Axle

All models...Use SAE 90 Extreme Pressure lubricant all year.

DUPLEX

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)
Hercules JXD	320.0	6	4 x 4 1/4
Hercules WXLC-3	404.0	6	4 1/4 x 4 1/4
Hercules RXC	529	6	4 5/8 x 5 1/4
Hercules RXLD	558	6	4 3/4 x 5 1/4
Continental F6244	244	6	3 7/16 x 4 3/8
Continental B6427	427	6	4 5/16 x 4 7/8
Continental U6501	501	6	4 1/2 x 5 1/4
Continental R6602	602	6	4 7/8 x 5 3/8

Oil Pressure

Her JXD, WXLC-3...	26 psi @ 1600 rpm
Her RXC, RXLD...	36 psi @ 1600 rpm
Continental engines...	55-65 psi @ 2000 rpm

Compression Pressure

(At cranking speed)

Hercules engines	95 psi
Con U6501	100 psi
Con F6244	115 psi
Other Con engines....	120 psi

IGNITION

Cam Angle (Dwell)

Hercules engines ...	31-37 deg
Continental engines.	39 deg

Breaker Point Gap

Hercules engines .....	.020 in.
Continental engines ..	.022 in.

SPARK PLUGS

Make & Type

Her engines	AL AT-8
Con U6501	CH 5 Com
Con R6602	CH J-8
Other Con	CH 8 Com

Size

Hercules engines	14 mm
Con R6602	14 mm
Other Con engines....	18 mm

Gap

All models025 in.
------------------	----------

VALVES

Operating Tappet Clearance

Her JXD	Inlet: .006 in. Exhaust: .008 in.
Her WXLC3	Inlet: .006 in. Exhaust: .010 in.
Her RXC, RXLD...	Inlet: .010 in. Exhaust: .016 in.
Continental engines..	See page 164

VALVE SPRINGS

Pressure

(Valve Open)

Her JXD...	58 lb @ 1.594 in.
Other Her engines...	102 lb @ 2.156 in.
Continental engines..	See page 164

LUBRICATION

Crankcase

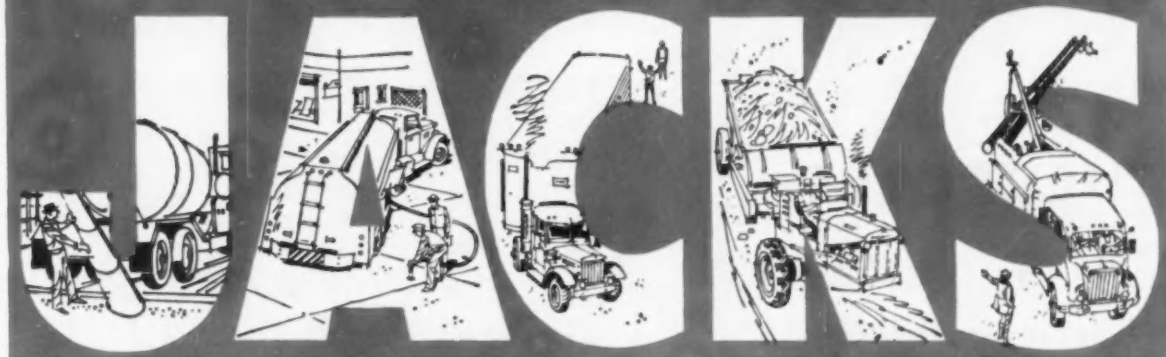
TH and WC 244 models...Above 80 deg use SAE 40; Between 32 and 80 deg use SAE 30; Between 0 and 32 deg use SAE 20W

All others...Above 80 deg use SAE 50; Between 32 and 80 deg use SAE 40; Between 0 and 32 deg use SAE 20W

Transmission & Rear Axle

All models...In Summer use SAE 140, in Winter use SAE 90

BLACKHAWK



lift the GIANTS



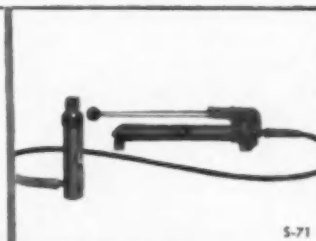
EA-11



D-8.7



CB-9



S-71

BLACKHAWK HYDRAULIC HAND JACKS 1½ through 20 tons; **Heavy-Duty Jacks** 30 through 100 tons. **EA-11** 20-ton "giant-tamer" shrugs off grueling service. **D-8.7** 12-ton popularity leader you'll use everywhere! **CB-9** 8-ton over-the-road traveler hustles breakdowns along faster, safer . . . plenty

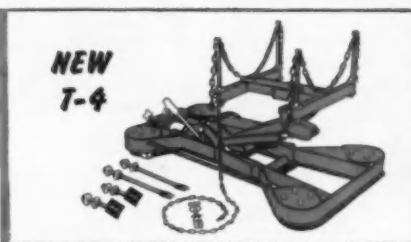
more to choose from. **Porto-Power**, world's most complete hydraulic body jack line! Ideal for body, truck reconditioning. Only **Porto-Power** offers more ways to push and pull, easier, faster setups! A complete family of rams, spreaders and matched attachments for every body job.

...baby your service budget!



NEW
SJ-20

BLACKHAWK SERVICE JACKS — 1½, 2, 4, 10 and 20-tons. Easy-to-spot, sneaks under lowest axles. "Ten-Tonner" handles everything that rolls!



NEW
T-4

NEW BLACKHAWK T-4 TRANSMISSION JACK — one of a complete line of four models, ½, 1 and 1-ton capacities. T-4 and one man easily handle all makes of truck transmissions!



NEW
AX-10, 11

BLACKHAWK RED STALLION — AX-2, 5, 7 and 10-ton garage horses or trestles. No accidental release, load-locked handles. Non-tipping. Sure-grip safety saddles.

Here's *proof* that Blackhawk delivers the *biggest* savings in service! For the 26th consecutive year, Bus Maintenance Efficiency Award winners have standardized on Blackhawk jacks!

Follow the lead of these winners! Slash your *maintenance* costs to the bone. Maintain every rig, large or

small — faster easier! Select from Blackhawk's most complete line of hydraulic jacks, 1½ to 100 ton capacities. There's a job-matched Blackhawk to do it better every time!

Call your automotive jobber now! He's waiting to give you a personal demonstration.



WORLD'S LARGEST MANUFACTURER OF HYDRAULIC AND MECHANICAL JACKS

BLACKHAWK

BLACKHAWK MFG. CO., Dept. J-1148, Milwaukee 46, Wisconsin

TRUCK DATA

CHEVROLET

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)
Thriftmaster	235	6	3 9/16 x 3 15/16
Jobmaster	261	6	3 3/4 x 3 15/16
Trademaster	283 LD	8	3 7/8 x 3
Taskmaster	283 HD	8	3 7/8 x 3
Loadmaster	322	8	4 x 3.2
Workmaster	348	8	4 1/8 x 3 1/4

Note: LD = light duty. HD = heavy duty. Engines are identified by their displacement in the specifications below.

Oil Pressure

Engine

322.....	35 psi @ 1600 rpm
348.....	35 psi @ 2000 rpm
All others...	30 psi @ 1170-1200 rpm

Compression Pressure

Engine

235, 261....	130 psi @ cranking speed.
283 LD, 283 HD....	140 psi @ cranking speed.
322...150 psi @ 140 rpm	cranking speed.
348...160 psi @ cranking speed	with spark plugs removed and wide open throttle.

IGNITION

Cam Angle (Dwell)

All 6-cyl engines....	26-33 deg
322	30 deg
Other 8-cyl engines..	28-32 deg

Breaker Point Gap

All 6-cyl engines..	.016-.023 in.
All 8-cyl engines..	.013-.019 in.

Spark Occurs

All 6-cyl engines...	Top center
All 8-cyl engines...	4 deg before top center.

SPARK PLUGS

Make & Type

Engine

322.....	AC C-42-1 Com
All others	AC 44

Size

All engines	14 mm
-------------------	-------

Gap

All engines033-.038 in.
-------------------	---------------

Torque

Engine

235, 261	15-25 lb-ft
283 LD & HD, 348..	20-25 lb-ft
322	22-28 lb-ft

VALVES

Operating Tappet Clearance

(Hot unless noted)

Engine

235	Inlet: .006-.011 in. Exhaust: .013-.018 in.
261	Inlet: .006-.011 in. Exhaust: .019-.024 in.
283, 322, 348	Zero

Seat Angle

Engine

235	Inlet: 31 deg Exhaust: 46 deg
-----------	----------------------------------

261	Inlet: 31 deg Exhaust: 45 deg
All others	Inlet: 46 deg Exhaust: 46 deg

Face Angle

Engine

235	Inlet: 30 deg Exhaust: 45 deg
All others	Inlet: 45 deg Exhaust: 44 deg

TENSIONS

Manifold Bolt

Engine

235, 261....	center: 15-20 lb-ft end: 25-30 lb-ft
283, 348....	center: 25-30 lb-ft end: 15-20 lb-ft
322..	center & end: 10-15 lb-ft

Cylinder Head Bolt

Engine

235, 261....	90-95 lb-ft (oiled threads).
283.....	60-70 lb-ft (oiled threads).
322	63-73 lb-ft
348	60-70 lb-ft

VALVE SPRINGS

Free Length

Engine

235	2.156-2.234 in.
261	2.234-2.281 in.
283	2.03 in.
322, 348	2.00 in.

Pressure

Engine

235, 261....	196-204 lb compressed to 1.462 in.
322...	(Valve open) Inlet: 91-97 lb @ 1.12 in.; Exhaust: 139-149 lb @ .960 in. (Valve closed) Inlet: 43-48 lb @ 1.50 in. Exhaust: 58-66 lb @ 1.34 in.
348....	184-196 lb @ 1.230 in.

BATTERY

Amp-Hour Capacity

Truck Model

Forward control models....	72
----------------------------	----

(TURN TO PAGE 82, PLEASE)



FROM **Aloha to Cumback**
2,381 MILES—\$1.19



For less than 1/20th of a cent a mile, a new AC Oil Filter keeps oil clean, protects your engine!



You are destined to drive over four times the distance from Aloha to Cumback—a total of 10,000 miles—during the next year, if you're an average trucker. The engine of your truck will be subjected to all driving, weather, terrain and traffic conditions. Any or all of these can affect its performance and efficiency.

The parts of your truck's engine are precisely machined to close tolerances. An AC Oil Filter cleans all of the oil in the engine every 30 seconds at normal speeds—protects the precision parts from possible damage by dirt, dust, grit and bits of metal as small as 1/100,000th of an inch.

So, the next time you change the oil in your engine—change to a new AC Oil Filter, too! Your nearby AC Dealer will tell you how little it costs.

Watch Walt Disney Studios' ZORRO every week—ABC-TV

CHANGE OIL AND FILTER, TOO!

AC SPARK PLUG  THE ELECTRONICS DIVISION OF GENERAL MOTORS

COMMERCIAL CAR JOURNAL, April, 1958

81

TRUCK DATA

CHEVROLET

Continued from Page 80

School buses	70
All others	53

Plates Per Cell

School bus models	11
All others	9

Terminal Grounded

All models	Neg
------------------	-----

SAE Group No.

School bus models	3SM
All others	2SM

FRONT END

Toe-In

3100, 3200 series..	.13-.22 in.
4-wheel drive ....	.031-.156 in.
All others .....	.25-.31 in.

Camber

4-wheel drive	1½ deg
7000-10000 series..	½-1½ deg
All others	1¼-1¾ deg

Caster

At curb weight	
3100, 3200 series.....	1½ deg
4-wheel drive	1¾ deg
3600, 6000 H.....	3 deg
3800, 6000	2¼ deg
34-, 35-, 3700.....	2 deg
41-, 44-, 45-, 5000....	2 deg
5000 H, 8000, 10000...	2½ deg
6242, 6642	2¾ deg
7000, 9000	1¾ deg

King Pin Slant

4-wheel drive	8 deg
7000-1000 series..	4 deg
All others	6.16-8.18 deg

CAPACITIES

Crankcase

Engine

235	Without filter: 5 qt
	With filter: 6 qt

261, 348 (filtered)	7 qt
322 (filtered)	7½ qt
283 LD & HD (filtered)	6½ qt

Transmission

Chevrolet 3-speed	2 pt
Chevrolet 4-speed	6¼ pt
New Process	9½ pt
Spicer 5-speed	12 pt
Powermatic (including heat exchanger)	38 ft
Hydra-Matic	18 pt
With oil cooler.....	20 pt

Rear Axle

Single-Speed

Chevrolet: ½-ton	4½ pt
¾ and 1-ton.....	6½ pt
1½-ton	14 pt
2 and 2½-ton.....	19 pt
Eaton: 1614-1615	19½ pt
1790A-1791A	19 pt

Two-Speed

All Chevrolet	20 pt
Eaton: 16600	19 pt
17800-17801	18 pt

Cooling System

Truck Model

½, ¾, 1-ton...	
With 235 engine:	17 qt
With 283 LD engine:	17½ qt
1½-ton Special...	
With 235 engine.	17½ qt
With 283 LD....	18 qt
5000 series...	
With 283 LD engine:	18½ qt
With Powermatic:	21 qt
6000 series...	
With 261 engine:	17 qt
With 283 LD....	18 qt
With Powermatic:	21½ qt
7000-8000 series...	
With 283 HD engine:	23 qt
With Powermatic:	23½ qt
9000-10000 series...	
With 348 engine:	29 qt
With Powermatic.	29½ qt
10800 School bus...	
With 322 engine:	21½ qt
With Powermatic:	22 qt

LUBRICATION

Crankcase

All engines...Above 32 deg use SAE 20, 20W or 10W-30. From 0 to 32 deg use SAE 10W or 10W-30. Below 0 deg use SAE 5W or 5W-20. Note: For sustained high-speed driving when daylight temperature is above 90 deg, SAE 30 may be used.

Rear Axle

All models...SAE 90 multi-purpose gear lubricant.
On electric shift units...
SAE 10 engine oil.

Transmission

Conventional models....SAE 90 straight mineral oil gear lubricant or SAE 90 multi-purpose gear lubricant.
Hydra-Matic...Type A automatic transmission fluid.
Powermatic...Type C hydraulic transmission fluid or Type A automatic transmission fluid.

MODEL NUMBERS

Truck model...On forward control models see plate on left side of steering column. Flat face cowl models have plate on the front face of cowl's top panel. All other models have plate on the body hinge pillar.

Engine...V-8 engine numbers are on top of right hand bank at front. 6-cyl engine numbers are on boss at rear of distributor.

Transmission...On 3-speed conventional, Overdrive and 4-speed models number is on right of rear face. On automatic transmissions it is on left side at rear. On 5-speed models it is on right side at rear bottom. On 3-speed Heavy Duty unit it is on left side at rear.

Front axle...Number is stamped on center of axle.

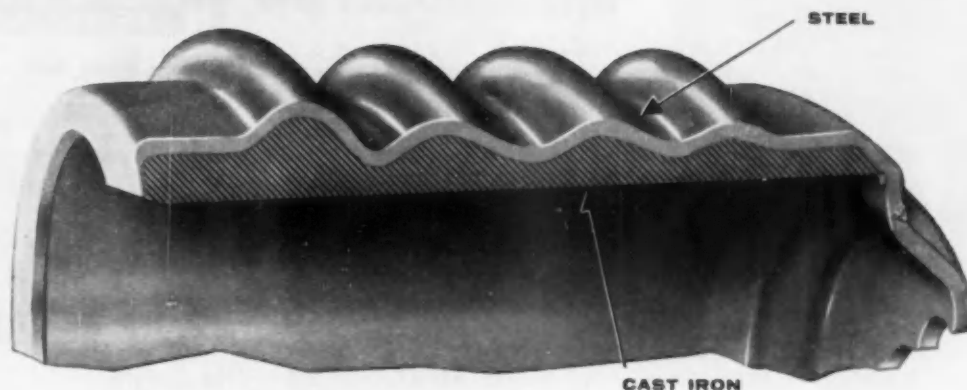
Rear axle...On 3100 series number is on front face, center of axle. On all others it is on top center.

25% LIGHTER FIVE TIMES STRONGER



exclusive MOTOR WHEEL

Centrifuse
BRAKE DRUMS



more payload means more profit

Centrifuse brake drums are up to 25% lighter because high grade steel replaces conventional cast iron on the drum shell — yet they are five times stronger! Centrifuse drums give you more operating economy and greater payloads.

Centrifuse brake drums are not cast — they combine the advantages of cast iron and steel by fusing molten iron to a tough outer steel stamping by centrifugal force. Motor Wheel's exclusive Centrifuse process provides a drum that's better in every way . . . lighter, stronger, safer, cooler and better balanced.

Over 100 million Centrifuse brake drums have been in service without a single break or explosion — no need to install steel bands to protect against premature cracks. Specify "Centrifuse" drums for your rolling equipment.



WHEELS



HUBS



BRAKE DRUMS



Write for the FREE Brochure on Centrifuse Brake Drums

MOTOR WHEEL CORPORATION
Lansing, Michigan

SERVING THE AUTOMOTIVE INDUSTRY SINCE 1906



TRUCK DATA

DIAMOND T

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke
XL-264A	264	6	3 11/16 x 4 1/8
XL-308A	308	6	3 13/16 x 4 1/2
XL-372	272	6	4 3/8 x 4 1/8
XL-406	406	6	4 3/8 x 4 1/2
XL-450	450	6	4 3/8 x 5
XL-501	501	6	4 1/2 x 5 1/4
H-S 590 GV3	590	6	5 x 5
Cummins Diesels			
JT-6-B, JBS	401	6	4 1/8 x 5
HB-600, NH-180	672	6	4 7/8 x 5
NHB-, HRFB-600	743	6	5 1/8 x 6
NTO-6B, NRT-	743	6	5 1/8 x 6

Oil Pressure

Engine

XL-264A...	30-40 psi @ 1500 rpm
Other XL- engines...	35-45 psi @ 1500 rpm
H-S 590 GV3...	60 psi @ 2800 rpm
Cummins engines ...	30-50 psi @ governed speed.

IGNITION

Cam Angle

Engine

XL-308A	28-35 deg
Other XL- engines..	31-37 deg
H-S 590 GV3	31-37 deg

Breaker Point Gap

Engine

XL-308A .....	.016 in.
Other gasoline engines	.022 in.

Spark Occurs

(Degrees Before Top Center)

Engine

XL-264A	2 deg
XL-308A	3 deg
Other XL- engines	5 deg

SPARK PLUGS

Make & Type

Engine

XL-264A, XL-308A...	AC 44, AL AT-8, CH J-8
XL-372, XL-406...	AC 44 Com, AL AT-6, CH J-7
XL-450, XL-501...	AC 43-5 Com, AL AT-6, CH J-7
H-S 590 GV3...	AC 42, AL A-3, CH J-5

Size

All engines	14 mm
-------------------	-------

Gap

All XL- engines .....	.027 in.
H-S 590 GV3 .....	.025 in.

Torque

All engines	30 lb-ft
-------------------	----------

VALVES

Operating Tappet Clearance

(Hot Unless Noted)

Engine

XL-264A...	Inlet & Exhaust: .024-.026 in.
------------	--------------------------------

Other XL- engines...

Inlet & Exhaust: .020-.022 in.

H-S 590 GV3...

Inlet & Exhaust: .021 in.

Seat Angle

Engine

XL-264A...	Inlet: 30 deg
	Exhaust: 30 deg

Other XL- engines...

	Inlet: 15 deg
	Exhaust: 45 deg
H-S, 590 GV3...	Inlet: 45 deg
	Exhaust: 45 deg

Face Angle

Engine

XL-264A	Inlet: 30 deg
	Exhaust: 30 deg

Other XL- engines...

	Inlet: 15 deg
	Exhaust: 45 deg
H-S, 590 GV3...	Inlet: 45 1/4 deg
	Exhaust: 45 1/4 deg

TENSIONS

Cylinder Head Bolt

Engine

XL-264A	85- 95 lb-ft
Other XL- engines...	100-110 lb-ft

H-S 590 GV3...

5/8-18: 140-160 lb-ft

7/16-20: 30- 40 lb-ft

VALVE SPRINGS

Free Length

Engine

XL-264A	2 11/16 in.
XL-308A	2 3/16 in.

Other XL- engines...

Inner:	2 11/32 in.
Outer:	2 9/16 in.

H-S 590 GV3...

Inner:	2 7/8 in.
Outer:	3 in.

Pressure

Engine

XL-264A...	149-159 lb @ 1 11/16 in.
------------	--------------------------

XL-308A...

182-190 lb @ 1 15/32 in.

Other XL- engines...

Inner: 83- 88 lb @ 1.503 in.

Outer: 133-141 lb @ 1.706 in.

H-S 590 GV3...

Inner: 80 lb @ 1 3/4 in.

Outer: 144 lb @ 1 13/16 in.

(TURN TO PAGE 86, PLEASE)



Diamond T Truck President Z.C.R. Hansen says:

**"Here's why we recommend
Kent-Moore tools for
factory-approved service"**



"Customer satisfaction—satisfaction with the Diamond T Truck and with the service that our dealers provide—is of utmost importance to the Diamond T Organization. We have entered into a cooperative tool program to help our dealers give their customers the best in truck service.

"Kent-Moore tool designers work closely with our own engineers to develop special tools for those maintenance operations which standard tools just can't perform efficiently. These special tools make it possible to reduce vehicle down time for repairs and to im-

prove the quality of workmanship. A better job, done to factory standards, in minimum time, can be achieved with efficient utilization of special tools.

"Thus, to help Diamond T customers enjoy better heavy duty truck service, we are recommending Kent-Moore special service

tools to our dealers and promoting their use in service operations. We also endorse the cost-saving potential of these 'Rate-Maker' special service tools to our fleet owners and operators."

Write to Kent-Moore concerning service problems on all vehicles and diesel engines.



KENT-MOORE
ORGANIZATION, INC.

28635 MOUND ROAD, WARREN, MICHIGAN

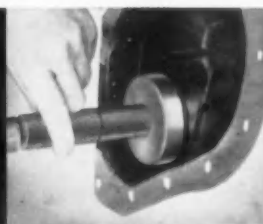
58-F1 ENGINEERS AND MANUFACTURERS OF SERVICE TOOLS AND EQUIPMENT



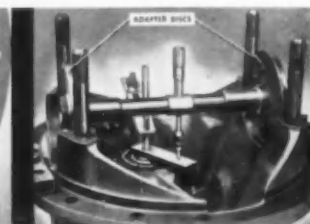
**TIMING GEAR COVER
ALIGNING GAUGE**



**CRANKSHAFT
GEAR REPLACER**



**TIMING GEAR COVER
OIL SEAL REPLACER**



**PINION SETTING
GAUGE SET**

PRECISION TOOLS FOR EVERY SERVICE NEED: The tools shown above are typical of the more than 400 tools, gauges and other special service equipment for Diamond T Trucks.

TRUCK DATA

DIAMOND T

Continued from Page 84

BATTERY

Amp-Hour Capacity

Truck Model

430C, 431, 530C, 531, 630, 630C	70
723, 723JT, 921, 923	168
921C, 921N, 921R, 950	200
All others	150

Plates Per Cell

Truck Model

430C, 431, 530C, 531, 630, 630C	13
723, 723JT, 921, 923	21
921C, 921N, 921R, 950	25
All others	19

Terminal Grounded

All models	Neg
------------------	-----

FRONT END

Toe-In

All models	1/8 in.
------------------	---------

Camber

921C (60FN 10 axle)....	0 deg
All others	1 deg

Caster

Truck Model

921C (60 FN 10 axle) .	0 deg
All 6-wheelers	1 1/2 deg
All others	1 deg

King Pin Slant

Truck Model

431, 531, 532	8 deg
630, 630 (6 wheeler) ..	4 deg
921C series, 720-950 se- ries with Shuler FE15, FE18 front axles	0 deg
All others	5 1/2 deg

CAPACITIES

Crankcase

XL-264A	6 qt
XL-308A	7 qt
Other XL-engines	9 qt
H-S 590 GV3	14 qt
Cum JT-6B, JBS-600....	16 qt
Other Cummins engines.	28 qt

Transmission

Warner T98, T98A	6 pt
X33, X330	11 pt
New Process 540	10 pt
Clark 205V & VO, 267V & VO	12 pt
Clark 290V & VO, 291V, 292VO	18 pt
Clark 268V....	

Transverter:

Converter:

Spicer 4752, 4753	13 pt
Spicer 6452, 6453	17 pt
Spicer 8041, 8045	16 pt
Spicer 8251, 8255	24 pt
Fuller 5A65, FA650	24 pt
Fuller 5C72, FC720	24 pt
Fuller 10FA650, 10FB650	36 pt
Fuller R96, R960	36 pt
Fuller 10B 1120	44 pt
Fuller R45	17 pt
Fuller R46	19 pt
Fuller R95C, R950C	32 pt

Auxiliaries

Spicer 6041, 6231, 7231..	8 pt
Spicer 8031, 8035, 8341, 8345	12 pt

Rear Axle

Clark R1000	11 pt
Eaton	
1350	13 pt
1790, 1791, 1792, 1793..	22 pt
1892, 1893, 18802, 18803	22 pt
1911, 19501, 19503	24 pt
2011, 20501, 20503	20 pt
22501	32 pt
2695, 2696	22 pt
22M (each axle)	12 pt
28M (each axle).....	17 pt
32M	28 pt
Front:	
Rear:	33 pt
36M (each axle)	24 pt

42M (each axle).....	
Front hole:	2 pt
Rear hole:	20 pt
56M (each axle)	24 pt

Timken

SLD, SLDD (each axle)	28 pt
SLHD	33 pt
Front:	
Rear:	32 pt
SQD, SQDD (each axle)	22 pt
SQW (each axle)	40 pt
SW456 (each axle)....	28 pt
SW3456 (each axle)...	24 pt
SW3458 (each axle)...	33 pt
SFD, SFDD 4600 (each axle)	28 pt
E100	15 pt
E300	13 pt
H100	20 pt
H200	28 pt
H300	26 pt
H140	18 pt
H240, H340	22 pt
L100	23 pt
L200, Q100	31 pt
L300	29 pt
Q200, R300	34 pt
Q300, QT240, QT340..	32 pt
QT140	24 pt
R100, R140	30 pt
R200	36 pt
RT240, RT340	32 qt
U200	38 pt
U300	39 pt

Cooling System

(For models with flat cast type radiators, add 8 qt to the following capacities.)

Truck Model

430C	29 qt
431	24 qt
530C	33 qt
531	28 qt
532, 830	35 qt
532C	38 qt
630, 662, 730, 830C	36 qt
630C, 730C	37 qt
662F, 730F	44 qt
830F	43 qt
831	42 qt
723	33 qt
723F	41 qt
723C, JT & CJT	32 qt
723JTF, 921N, 921BN...	40 qt
921, 921B, 921R, 921BR..	42 qt
921F, 921FR	50 qt
921 FN	48 qt
921C, 921CR, 921CN....	55 qt
923, 923B	45 qt
923F	53 qt
950, 950RS	56 qt

LUBRICATION

Crankcase

XL- engines...Above 90 deg use SAE 50; Between 32 and 90 deg use SAE 40; Between 10 and 32 deg use SAE 20W; Below 10 deg use SAE 10W.

H-S 590 GV3...Above 90 deg use SAE 40; Between 32 and 90 deg use SAE 30; Between 10 and 32 deg use SAE 20W; Below 10 deg use SAE 20W.

Cummins engines...Above 90 deg use SAE 30; Between 32 and 90 deg use SAE 20; Between 10 and 32 deg use SAE 10 or

20; Below 10 deg use SAE 20W.

Transmission

Spicer...Use SAE 50 engine oil all year.

Fuller...Use straight mineral gear oil SAE 140 in Summer, SAE 90 in Winter, SAE 80 below 0 deg.

Clark, Warner, and New Process...Use straight mineral gear oil. Use SAE 140 in Summer, SAE 90 in Winter.

Rear Axle

Eaton planetary 2-speed...Use

SAE 90 multi-purpose gear lubricant all year.

Eaton hypoid...Use SAE 90 multi-purpose gear lubricant all year. Above 100 deg use SAE 140; Below -10 deg use SAE 80.

Clark hypoid...Use SAE 90 multi-purpose gear lubricant all year. Above 100 deg use SAE 140.

Timken worm drive...Use SAE 140 all year. Below 0 deg use SAE 90.

Other Timken axles...Use SAE 140 multi-purpose gear lubricant all year. Below 0 deg use SAE 90.

DIVCO

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)
Divco Super 6	252.6	6	3½ x 4¾
Con F4162	162	4	3 7/16 x 4¾
Con F4162 Super	162	4	3 7/16 x 4¾
Her QXD3	229.7	6	3 7/16 x 4½

Oil Pressure

Engine

Divco Super 6...
30-50 psi @ high spd. Hot
Con engines...
30-40 psi @ high spd. Hot
Her QXD3...
25-30 psi @ high spd. Hot

Compression Pressure

Engine

Divco Super 6, Her QXD3...
120 psi @ cranking speed
Con engines...
110 psi @ cranking speed

Breaker Point Gap

Engine

Divco Super 6... .021 in.
Con engines... .020 in.
Her QXD3... .018 in.

Spark Occurs

Degrees before (B) or after (A)
Top Center

Engine

Divco Super 6... 4A
Con engines... 9B
Her QXD3... 4B

SPARK PLUGS

Make & Type

Engine

Divco Super 6...CH J-8 or AC 45
Con engines...CH 8 Com or AC 86
Her QXD3...
CH J-11 or AC 48 Com

Size

Con engines... 18 mm
All others... 14 mm

Gap

Engine

Divco Super 6... .030 in.
Con engines... .035 in.
Her QXD3... .025 in.

Torque

Engine

Divco Super 6... 25-30 lb-ft
Her QXD3... 30 lb-ft

VALVES

Operating Tappet Clearance

(Hot unless noted)

Engine

Divco Super 6... Inlet: .012 in.
Exhaust: .016 in.
Con F4162 (Cold)...
Inlet: .012 in.
Exhaust: .014 in.
Con F 4162 Super (Cold)...
Inlet & Exhaust: .016 in.
Her QXD3... Inlet: .008 in.
Exhaust: .010 in.

Seat Angle

Engine

Divco Super 6... Inlet: 30 deg
Exhaust: 45 deg
Con engines... Inlet: 30 deg
Exhaust: 45 deg
Her QXD3...
Inlet & Exhaust: 30 deg
(TURN TO PARE 88, PLEASE)

IGNITION

Cam Angle (Dwell)

Engine

Divco Super 6... 38-45 deg
Con engines... 25-34 deg
Her QXD3... 31-37 deg

TRUCK DATA

DIVCO

Continued from Page 87

Face Angle

Divco Super 6.....Inlet: 29 deg
Exhaust: 44 deg

TENSIONS

Manifold Bolt

Divco Super 6..... 15-20 lb-ft
Con engines..... 35-40 lb-ft
Her QXD3..... 60 lb-ft

Cylinder Head Bolt

Engine
Divco Super 6..... 65-70 lb-ft
Con engines..... 70 lb-ft
Her QXD3..... 60 lb-ft

VALVE SPRINGS

Pressure

Engine

Divco Super 6...
53 lb @ 1 13/16 in.
Con engines...
50 lb @ 1 11/16 in.
Her QXD3... 41 lb @ 1 9/32 in.

BATTERY

Amp-Hour Capacity

All models..... 105

Plates Per Cell

All models..... 15

Terminal Grounded

All models..... Pos

FRONT END

Toe-In

All models..... 1/16 in.

Camber

All models..... 1 deg

Caster

All models (empty)... 1½ deg

King Pin Slant

All models..... 8 deg

CAPACITIES

Crankcase

Divco Super 6..... 6 qt
Con engines..... 3½ qt
Her QXD3..... 5 qt

Transmission

Truck Model

41, 42, 51, 52..... 7¼ pt
All others..... 5 pt

Rear Axle

Truck Model

214, 224, 334, 374..... 7½ pt
41, 51..... 11 pt
All others..... 5½ pt

Cooling System

Truck Model

11, 12, 13, 114, 124, 134, 364... 11 qt
41, 42, 51, 52..... 16 qt
All others..... 12½ qt

LUBRICATION

Crankcase

Divco Super 6...
Summer: SAE 20W
Winter: SAE 10W
All others...
Summer: SAE 30
Winter: SAE 20W

Transmission

All models...
Summer: SAE 140
Winter: SAE 90

Rear Axle

All models...
Summer: SAE 140
Winter: SAE 90

MODEL NUMBERS

Truck model... On capacity plate at windshield header (RH) on all models. Also stamped on right hand frame side rail at upper part of drop center (lift transmission cover to see) on Models Nos. 41, 42, 51 and 52. On all other models, also on right hand frame corner gusset (lift right hand hood to see).

Engine... Divco Super 6-Cyl—Right front upper side of cylinder block just below cylinder head (spot painted yellow). Continental—left side of engine on data plate and on raised pad of cylinder block near head at left front. Hercules QXD3—Right side on data plate and on cylinder block near cylinder head at left side, upper center.

Transmission... Left rear upper corner of transmission case next to corner of tower on upper flat surface.

Rear Axle... Timken—On plate riveted to rear surface of left hand housing center. International Harvester L-150 and L-160—Stamped on upper part of front of pinion carrier housing.



**resists
impact**



These horns are built to stand sudden shock. And Parish Pressed Steel Division of Dana Corporation, a leading manufacturer of automotive chassis and frames, uses A.W. Dynalloy steel for the same reason...resists impact!

There are other reasons, of course. A.W. Dynalloy is

- ... easy to form
- ... easy to weld
- ... resistant to corrosion

As with Parish Pressed Steel, A.W. Dynalloy can help you get more value per dollar spent for your product. Send for our A.W. Dynalloy booklet which gives complete information. Write Marketing Division, Dept. DY-E91.



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ANNOUNCING DELCO SUPER 99 HEAVY-DUTY BRAKE FLUID

New Delco SUPER 99 offers heavy-duty braking protection at economical cost! This outstanding new brake fluid has the high minimum boiling point—350° F. and above under operating conditions—that safe braking requires with today's faster, heavier cars. But best of all, while the boiling point is high—the price is low!*

And Delco SUPER 99 brake fluid flows freely at —60° F.! It is chemically and physically stable, and compatible with all brake system rubber and metal parts, as well as other quality brake fluids.

Order new Delco SUPER 99 brake fluid today! Available through the United Motors System or the Chevrolet Division in convenient 12-oz. cans, or in a variety of other sizes, up to 54-gallon drums. Sell and use Delco SUPER 99 brake fluid with the confidence that it provides heavy-duty protection in excess of SAE specifications.



DELCO SUPER 11 Brake Fluid

Improved with HTD for Maximum Protection in Excess of 400° F. Under Operating Conditions*—There is No Better Brake Fluid!



**HEAVY-DUTY
PROTECTION IN
EXCESS OF 350° F.
UNDER OPERATING
CONDITIONS*—
*at economy prices!***

*In wheel cylinders under normal static pressures



Moraine Products

Division of General Motors, Dayton, Ohio

TRUCK DATA

DODGE

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)
230	230.2	6	3.25 x 4.625
250	250.6	6	3.437 x 4.50
265	265.37	6	3.437 x 4.766
265 (a)	265.37	6	3.437 x 4.766
314	314.61	V-8	3.63 x 3.80
314 HD	314.61	V-8	3.63 x 3.80
314 DR	314.61	V-8	3.63 x 3.80
354 DR	354.06	V-8	3.94 x 3.63
354 DR (a)	354.06	V-8	3.94 x 3.63

(a)—Twin 2-barrel carburetors. HD—Heavy duty model. DR—Double rocker shaft and hemispherical combustion chambers.

Oil Pressure

All 6-cyl engines... 40 psi @ 800 rpm
All 8-cyl engines... 50-65 psi @ 1500 rpm

Compression Pressure

(At minimum engine cranking speed of 150 rpm with spark plugs removed and wide open throttle.)

Engine	
230	120-160 psi
250, 265	130-145 psi
314, 314 HD	120-160 psi
314 DR	120-155 psi
354 DR	100-140 psi

IGNITION

Cam Angle (Dwell)

All 6-cyl engines...	36-42 deg
314, 314 HD, 314 DR	27-32 deg
354 DR (on C700 only)	27-32 deg
354 DR	26-28 deg

Breaker Point Gap

All 6-cyl engines...	.018-.022 in.
All V-8 engines...	.015-.018 in.

Spark Occurs

(Degrees Before Top Center)

All 6-cyl engines.....	2 deg
All 314 V-8 engines....	6 deg
All 354 V-8 engines....	4 deg

SPARK PLUGS

Make & Type

All 6-cyl engines...	AL AR-51
314 DR	AL AR-41
All other V-8's....	AL AGR-41

Size

All engines	14 mm
-------------	-------

Gap

All engines	.035 in.
-------------	----------

Torque

All engines	30 lb-ft
-------------	----------

VALVES

Operating Tappet Clearance (With Hot engine)

Engine	
265	Inlet: .010 in. Exhaust: .018 in.

Other 6-cyl.... Inlet: .010 in.
Exhaust: .014 in.
All V-8's ...zero lash, inlet and exhaust.

Seat & Face Angle

All engines... Inlet & Exhaust: 45 deg

VALVE SPRINGS

Free Length

All 6-cyl engines...	Inlet & Exhaust: 2 in.
314...	Inlet & Exhaust: 1 15/16 in.
314 HD, 314 DR...	Inlet: 1 15/16 in. Exhaust: 1 13/16 in.
354	Inlet: 2 in. Exhaust (Inner and Outer): 1 15/16 in.

Pressure

All 6-cyl engines...	Inlet and Exhaust: 107-116 lb compressed to 1 3/8 in.
314...	Inlet & Exhaust: 160-172 lb compressed to 1 5/16 in.
314 HD, 314 DR...	Inlet: 160-172 lb compressed to 1 15/16 in. Exhaust: 134-146 lb compressed to 1 13/64 in.
354...	Inlet: 160-172 lb compressed to 1 5/16 in. Exhaust (inner): 40-45 lb compressed to 1 13/16 in. Exhaust (outer): 122-130 lb compressed to 1 5/16 in.

TENSIONS

Cylinder Head Bolt

All 6-cyl engines	70 lb-ft
All 8-cyl engines	85 lb-ft

BATTERY

Amp-Hour Capacity

Truck Model	
All 700, 800, 900 series...	70
S400-600, D400-600	60
W300, W500 (6-cyl eng)...	60
All others	50

Plates Per Cell

All 700, 800, 900 series	13
All others	11

(TURN TO PAGE 94, PLEASE)

Five years of grueling road tests, over mountain roads, in desert heat and in city traffic . . . five years of continuous research in Chrysler laboratories . . . these stand behind this news announcement of major importance.



EXTRA SAFETY

announcing: nearly 100° of extra protection
with new MoPar "Hi-Temp" Brake Fluid

Today's new MoPar "Hi-Temp" Heavy-Duty Brake Fluid stands up to heat nearly 100° higher than present specifications established by the Society of Automotive Engineers.

This "difference in degree" can make all the difference in safety, because the friction heat of braking can raise brake fluid to the boiling point—and bubbles in the lines can cause brake fading and failure. MoPar "Hi-Temp" means many extra degrees of assurance.

Order this entirely new kind of brake fluid from your MoPar wholesaler salesman or your Plymouth, Dodge, De Soto, Chrysler, Imperial or Dodge truck dealer now.

IT'S SMART TO BE RIGHT IN BRAKE REPAIR!

It pays to use products you know and trust—MoPar Cyclebond Brake Linings, MoPar Brake Hose, Cyclebond Exchange Brake Shoe and Lining Sets. These are official, authentic Chrysler Corporation products, made to highest precision standards.



MoPar Division, Chrysler Motors Corporation
Detroit 31, Michigan

TRUCK DATA

DODGE

Continued from Page 92

Terminal Grounded

All models Neg

FRONT END

Toe-In

All models 0-1/8 in.

Camber

(Front axle models designated by rated capacity.)

2500-3750 lb	1 1/2 deg
4000 lb	2 deg
4500 lb	1 1/2 deg
5000 lb	2 deg
6000-9000 lb	1 deg

Caster

(Front axle models designated by rated capacity and truck application.)

2500 lb	3 deg
2800 lb	2 1/2 deg
3000 lb	3 deg
3750 lb	1/2 deg
4000 lb	1 1/2 deg
4500 lb	3 1/2 deg
5000 lb (C&D 600-700)	1/4 deg
On other trucks:	2 1/2 deg
6000, 7000 lb	2 3/4 deg
9000 lb	3 1/4 deg

King Pin Slant

(Front axle models designated by rated capacity.)

2500, 2800 lb.....	4 deg
3000, 4500 lb.....	7 1/2 deg
3750 lb	8 deg
4000, 5000 lb.....	7 deg
6000-9000 lb	5 1/2 deg

CAPACITIES

Crankcase

(Without filter. Filters are 1 or 2 quart added capacity.)

All 6-cyl engines 5 qt

314	5 qt
354	8 qt

Transmission

Dodge 3-speed	2 3/4 pt
With Overdrive ..	3 1/2 pt
New Process 89905....	3 1/2 pt
Warner T87D	6 pt
New Process 420.....	5 1/2 pt
New Process 540.....	9 1/2 pt
Clark 265	12 pt
Clark 300	15 pt
"Torqmatic"	22 pt
"Load Flite"	19 pt
Spicer Auxiliaries...	

5831, 3-speed:	4 pt
6231, 3-speed:	8 pt
6041, 4-speed:	8 pt

Transfer Case

New Process 91000....	6 1/2 pt
New Process 39360....	5 pt
Timken T223-E	4 pt

Rear Axle

Dodge 3600 lb	3 3/4 pt
Dodge 6500 lb	5 1/2 pt
Dodge 6500 lb opt ...	6 pt
Dodge 8000 lb	6 pt
Timken F-147	16 pt
Eaton 1614	17 pt
Timken H-141	20 pt
Timken L-140	22 pt
Timken QT-140	24 pt
Timken RT-140	30 pt

Two-Speed

Eaton A5-1350, 13800.	13 pt
Eaton 16600	20 pt
Timken H-341	22 pt
Timken L-340	24 pt
Timken QT-340	32 pt
Timken RT-340	33 pt

Tandem (Bogie Unit)

Timken SDHD	33 pt
Timken SFHD	35 pt
Timken SLHD, SQHD.	52 pt

Cooling System

Truck Model

D100-D300-P300...	
6-cyl engine: 12	qt
8-cyl engine: 19	qt

P400, W100, W200...

6-cyl engine: 12	qt
8-cyl engine: 19	qt

W300M 17 qt

W300... 6-cyl engine: 12	qt
8-cyl engine: 24	qt

D400, S400...

6-cyl engine: 18	qt
8-cyl engine: 24	qt

D500, S500... 250 engine: 18	qt
265 engine: 15 1/2	qt

314 engine: 25 qt

W500... 6-cyl engine: 19	qt
8-cyl engine: 25	qt

C500, C600 25 qt

D600, S600...

6-cyl engine: 19	qt
8-cyl engine: 25	qt

700 series 25 qt

800 series 26 qt

LUBRICATION

Crankcase

All engines...Above 32 deg use SAE 30; From 10 to 32 deg use SAE 20W; From -10 to 10 deg use SAE 10W; Below -10 deg use SAE 5W.

Transmission

All manual transmissions..Above -10 deg use SAE 90; Below -10 deg use SAE 80.

"Load Flite"...Above -10 deg use Type A automatic transmission fluid; Below -10 deg for prolonged operation replace fluid with 1 quart refined kerosene.

"Torqmatic"...Above -10 deg use Type A or C automatic transmission fluid. Below -10 deg use Type A only.

Rear Axle

All models delivered with SAE 90 multi-purpose gear lubricant. Single-speed (Models 100-500)... Above 90 deg use SAE 140; From -10 deg to 90 deg use SAE 90; Below -10 deg use SAE 80.

Single and 2-speed models (Models 400, 500, 600)...Above 90 deg use SAE 140; From -10 to 90 deg use SAE 90; Below -10 deg use SAE 80.

All other single and 2-speed axles and inter-axle differentials... Above 0 deg use SAE 140; Below 0 deg use SAE 90.



For full-time
protection

... call for
HASTINGS

You can install Hastings Oil Filter Cartridges and *know* you'll have clean oil all the time . . . from filter change to filter change. The reason is *Densite!*

Densite is an entirely different type of filtering material. Many millions of selected cotton fibres—pressure packed—absorb dirt far beyond the capacity of ordinary filters.

Next time you change cartridges, call for Hastings and get *full time* protection!

HASTINGS MANUFACTURING COMPANY, HASTINGS MICHIGAN
Also makers of Piston Rings, Casite Wear Reducer, Spark Plugs

Hastings Oil Filter Cartridges
keep oil clean from filter change
to filter change*

U. S. Patent Nos.
2,797,811
2,584,771

*When replaced as normally recommended. Proved by tests conducted in accordance with U. S. Bureau of Standards procedure.





FIRESTONE CHALLENGER RIM CUTS DEADWEIGHT PER WHEEL!



Low-Priced and Lightweight Rim Passes Heavyweight Stress Tests to Add Dollars to Payloads.

Firestone's new Challenger rim turns deadweight into payload. Stress-testing in Firestone labs results in removing virtually all non-functional weight and the addition of reinforcement at high stress points for heavy loads. It's pounds lighter, and proved by performance in over-the-road runs! Exclusive Firestone Permaplate finish resists rust and corrosion. Two-piece rim construction makes possible fast mounting and demounting. Center to center spacing on duals gives quick interchanges. The Challenger runs true because it's sized to Firestone's precision standards.

The Firestone Challenger is the lowest priced quality rim you can own. Buy it for replacements. Specify it as original equipment. You'll get more payload profit on every run.

**FIRESTONE STEEL PRODUCTS CO.
AKRON 1, OHIO**

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58-F1



Racking Up Profits

WITH NEW ACME ENAMEL SYSTEM

New 135 Kwik-Slik Non-Sanding Primer-Sealer gives slick enamel jobs quicker and with lower cost

Your priming, sealing and ground coat requirements are all rolled into one fast-working product . . . Acme's new 135 Kwik-Slik.

It's a synthetic product—so it works wonderfully with Fleet-X Enamel. Our chemists say that because it's a synthetic undercoat, it has a real "affinity" for synthetic enamel. Let's just say they're made for each other and work well together to give the proper bond.

Like its name says, it requires no sanding. That's one reason it's quick. Another: it dries in 30 minutes for recoating with Fleet-X Enamel.

So, the next time you want to turn out a really good, low-cost enamel job quickly, try Acme's new all-synthetic system with 135 Kwik-Slik. And to thin it just right, add DV-61 to your team—for even more profits . . . since it can be thinned 100%.

Call your
ACME
JOBBER



ACME

AUTOMOTIVE FINISHES

ACME QUALITY PAINTS, INC.
8250 St. Aubin • Detroit 11, Michigan

TRUCK DATA

FORD

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore and Stroke (in.)
223 Six	223	6	3.62 x 3.60
272 V-8	272	8	3.62 x 3.30
272 HD V-8	272	8	3.62 x 3.30
302 HD V-8	302	8	3.62 x 3.66
332 HD V-8	332	8	3.80 x 3.66
401 SD V-8	401	8	4.12 x 3.75
477 SD V-8	477	8	4.50 x 3.75
534 SD V-8	534	8	4.50 x 4.20

Oil Pressure

Engine

302 HD V-8, 332 HD V-8....
35-40 psi @ 2000 rpm. Hot.
All others....45-50 psi @ 2000
rpm. Hot.

Compression Pressure

All engines....150 psi @ crank-
ing speed.

Size

All engines 18 mm

Gap

All engines028-.032 in.

Torque

All engines15-20 lb-ft

VALVES

Operating Tappet Clearance

(Hot unless noted)

Engine

223 Six, 272, 272 HD....
Intake & Exhaust: .019 in.
302, 332 HD...Intake: .009 in.
Exhaust: .021 in.

Seat Angle

401, 477, 534 SD V-8's....
Intake and Ex-
haust: 45½-45¾ deg
All others 45 deg

Face Angle

223 Six, 272, All HD's... 45 deg

IGNITION

Cam Angle (Dwell)

Engine

223 Six 35-38 deg
V-8 engines 26-28½ deg

Breaker Point Gap

Engine

223 Six024-.026 in.
V-8 engines014-.016 in.

Spark Occurs

(Degrees Before Top Center)

All engines 4 deg

SPARK PLUGS

Make & Type

Engine

223 Six, 272 V-8..... CH 860
All others CH F-10

VALVE SPRINGS

Pressure—Valve Open

523 Six, 272, All HD's....
161-177 lb @ 1.39 in.

SD engines....

178-192 lb @ 1.28 in.

Pressure—Valve Closed

Engine

223 Six, 272, All HD's....

64 lb @ 1.78 in.

SD engines....84-89 lb @ 1.70 in.

BATTERY

Amp-Hour Capacity

Truck Model

F-100 thru F-700..... 55
F-750 thru F-1100..... 70
C-550 thru C-700..... 55
C-750 thru C-1100..... 70
T-700 55
T-750 thru T-950..... 70
B series 70
P series 55

Number of Plates

Truck Model

F-100 thru F-700..... 66
F-750 thru F-1100..... 78
C-550 thru C-700..... 66
C-750 thru C-1100..... 78
T-700 66
T-750 thru T-950..... 78
B series 78
P series 66

Terminal Grounded

All trucksNeg

FRONT END

Toe-In

All trucks (Maximum) 1/16 in.

Camber

All trucks 1 deg
Max. var. between wheels: ¼ deg

Caster

Truck Model

F-100, F-250..... 2½-3½ deg
F-350 2¾-4¾ deg
P-350 3 -5 deg
P-500 (154 in. wh.
base) 2½-4½ deg
F-500 (154 in. wh.
base) 3½-5½ deg
B-500, B-600, F-600 3½-5½ deg
All others 2 -4 deg
Max. var. between wheels: ½ deg
(TURN TO PAGE 102, PLEASE)



Call your National Oil Seal jobber

Get his free custom service that helps reduce down time



It's simple. Your jobber checks your equipment, and puts into your shop a select stock of oil seals your mechanics use regularly. He maintains the stock and modifies it as your equipment changes.

You always have seals when needed, don't add down time waiting for seals to arrive. You get perfect replacement since Nationals are original equipment.

No more in cost. But a real savings in down time! Ask your National jobber today to analyze your fleet's oil seal needs.

FEDERAL-MOGUL SERVICE

Division of Federal-Mogul-Bower Bearings, Inc.
Detroit 13, Michigan





The sintered copper alloy bearings that were designed for Heavy-Duty Operation!

Each dustlike particle of this metal powder is a perfectly proportioned alloy of copper and lead—and it is the exclusive, patented process for producing this powder that made possible today's mileage-building Fm heavy-duty bearings. The copper alloy is sintered to the steel bearing back and a brass barrier adds stability to the lining. Lead-tin overplating assures smooth "break in" and a pure tin flash plating gives corrosion resistance. These are the mileage builders that are first choice of the nation's fleets! Ask your Federal-Mogul Jobber!



FEDERAL-MOGUL SERVICE
Division of Federal-Mogul-Bower Bearings, Inc.



**Now . . . A Giant Stride Ahead
In Modern Fleet Refinishing!**

DITZLER'S NEW
Speed-Sand
SYNTHETIC PRIMER SURFACER

Helps You Turn Out Jobs Better and Faster!

- Gives you a straight synthetic system for spraying enamel jobs on passenger cars, trucks and buses.
- Fills as it primes, covering surface imperfections and file marks.
- Dries through to an even, smooth finish in half the time . . . Jobs can be sanded in two or three hours quickly and easily without sand scratches.
- Provides firm bond between metal surfaces and finish coat on steel and aluminium.
- Does not lift old enamel surfaces.
- Has outstanding color hold-out . . . Finish coats dry with beautiful even gloss on its smooth, level surface.
- New SPEED-SAND also makes a good non-sanding primer. Just spray one full wet coat, let dry for half an hour, then apply enamel color coat.
- SPEED-SAND is available in White DPS-8, Gray DPS-30, Cream DPS-80, and Red Oxide DPS-70.

You'll find you can reduce time and labor costs with the new SPEED-SAND Synthetic Primer Surfacers. Try it on your next refinishing job.

Ditzler Color Div., Pittsburgh Plate Glass Company, Detroit 4, Mich.



DITZLER®

PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS • FIBER GLASS

PITTSBURGH PLATE GLASS COMPANY

IN CANADA: CANADIAN PITTSBURGH INDUSTRIES LIMITED

FORESIGHT



Planning for tomorrow • Producing for today!

Since the earliest days of the industry, Bendix foresight in product design and development has contributed materially to automotive progress.

For example, Bendix* power braking and power steering, two of the industry's most popular new car features, are the results of years of research and engineering by Bendix specialists in these important fields.

Today Bendix engineers are likewise busy planning

and developing new and better products to meet the needs of the years ahead.

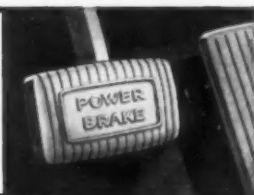
It is because of this foresight the automotive industry looks to Bendix for components that continue to lead in public acceptance and dependable performance.

*REG. U.S. PAT. OFF.

BENDIX PRODUCTS DIVISION SOUTH BEND INDIANA

Export Sales: Bendix International Division, 205 East 42nd Street, New York 17, N. Y.

**TYPICAL
EXAMPLES**



Bendix Power Brakes



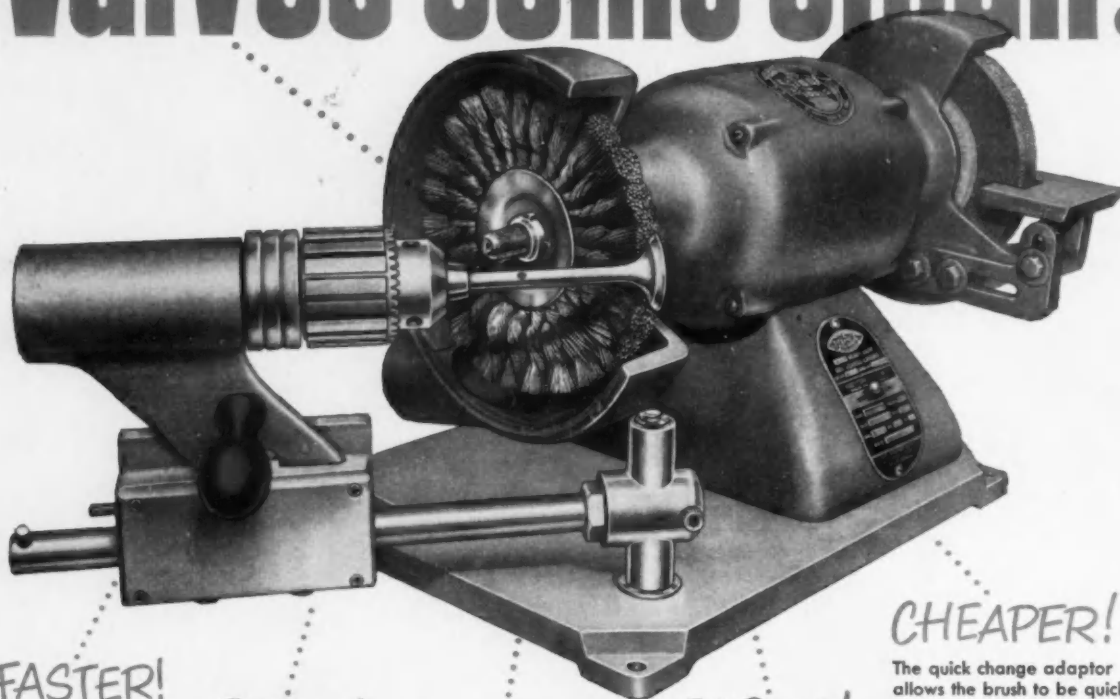
Bendix Power Steering

Bendix
**Products
Division**

Bendix
AVIATION CORPORATION

BRAKES • POWER STEERING • POWER BRAKING • CONSTANT VELOCITY UNIVERSAL JOINTS • HYDRAULIC REMOTE CONTROLS

Valves come clean!



FASTER!

Valves can be cleaned in 15 seconds.

SAFER!

Chuck holds valve; fingers are never near wire brush.

BETTER!

Hardest carbon deposits disappear, leaving a clean, shiny surface.

EASIER!

Takes the drudgery out of valve cleaning. The machine does the work. No skill required.

CHEAPER!

The quick change adaptor allows the brush to be quickly and easily reversed thus bringing sharp cutting points into play. Dull brushes stop cutting. Frequent reversing triples the life of the brush.

**WITH
THE
NEW**

SIOUX



REVERSING
KEEPS SHARP
EDGES AT WORK



QUICK
CHANGE
ADAPTOR

VALVE CLEANER ATTACHMENT

The **SIOUX Valve Cleaner** can be supplied with bench grinder as shown or sold as an attachment to fit an existing 6", 7", or 8" bench grinder. It's another entirely new product exclusively from SIOUX to you.



ALBERTSON & CO., INC.

SIOUX CITY, IOWA, U. S. A.



NEW AIR IMPACT WRENCHES • NEW AIR SCREWDRIVERS • NEW "PELICAN" NUT ACCUMULATORS •
ELECTRIC IMPACT WRENCHES • DRILLS • GRINDERS • SANDERS • POLISHERS • SCREWDRIVERS
• PORTABLE SAWS • VALVE FACE GRINDING MACHINES • FLEXIBLE SHAFTS • ABRASIVE DISCS

Valve Seat Inserts of Solid Cast Eatonite—



Last Longer— make Valves Last Longer

For engines in heavy-duty service where high operating temperatures are experienced over extended periods of time, Eaton Valve Seat Inserts have proven their ability to materially reduce valve and insert failures, to maintain a high level of engine output—and to add extra thousands of trouble-free hours to valve life.

As a result, maintenance cost is reduced to a minimum, and engines are kept on the job, out of the shop.

MAXIMUM DURABILITY

High Hot Strength

High Hot Hardness

Freedom from
Corrosion, Wear,
Cracking, Loosening

EATON

—SAGINAW DIVISION—
MANUFACTURING COMPANY
9771 FRENCH ROAD • DETROIT 13, MICHIGAN



PRODUCTS: Sodium Cooled, Poppet, and Free Valves • Tappets • Hydraulic Valve Lifters • Valve Seat Inserts • Jet Engine Parts • Rotor Pumps • Motor Truck Axles • Permanent Mold Gray Iron Castings • Heater Defroster Units • Snap Rings • Springtites • Spring Washers • Cold Drawn Steel • Stampings • Leaf and Coil Springs • Dynamatic Drives, Brakes, Dynamometers

TRUCK DATA



FWD

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke
IHC BD-240	240	6	3 9/16 x 4 1/64
IHC BD-282	282	6	3 13/16 x 4 1/8
IHC BD-308	308	6	3 13/16 x 4 1/2
IHC RD-372	372	6	4 3/8 x 4 1/8
IHC RD-406	406	6	4 3/8 x 4 1/2
IHC RD-450	450	6	4 3/8 x 5
IHC RD-501	501	6	4 1/2 x 5 1/4
Wau 145 GK	779	6	5 1/4 x 6
Wau 145 GKB	779	6	5 1/4 x 6
Diesels			
GMC 3-71	213	3	4 1/4 x 5
GMC 4-71	284	4	4 1/4 x 5
GMC 6-71	426	6	4 1/4 x 5
Cum JT-6-B	401	6	4 1/8 x 5
Cum HR-6-B	743	6	5 1/8 x 6
Cum HRF-6-B	743	6	5 1/8 x 6
Cum NH-6-B	743	6	5 1/8 x 6

Oil Pressure

Engine

IHC BD-240 thru RD-406....
40-45 psi @ 1200 rpm
IHC RD-450, RD-501....
40-45 psi @ 1500 rpm
Wau 145 CK...40 psi @ 2000 rpm
Wau 145 GKB...40 psi @ 2400 rpm
GMC engines....25 psi Minimum
Cummins engines....
30-50 psi @ Gov. speed

IGNITION

Cam Angle

All gasoline engines 31-37 deg

Breaker Point Gap

IHC engines018—.024 in.
Wau engines018 in.

Spark Occurs

(Degrees Before Top Center)

IHC BD-240 4 deg
IHC BD-282, BD-308.... 6 deg
Other IHC engines..... 5 deg
Wau engines TC

SPARK PLUGS

Make & Type

IHC BD-2 engines....
CH J-8, AC 43 Com or AL A5
IHC RD engines....
CH J-6, AC 43 Com or AL A5
Wau engines CH J-9

Size

All IHC engines 14 mm
Wau engines 18 mm

Gap

All IHC engines.. .028-.033 in.
Wau engines025 in.

Torque

All engines 28-30 lb-ft

BATTERY

Amp-Hour Capacity

Models with....
IHC BD-engines 70
IHC RD-engines 90

Wau engines (2 batteries). 140
Diesel engines 150

Plates Per Cell

Models with....
IHC engines 13
Wau engines 21
Diesel engines 19

SAE Group No.

Models with....
IHC BD-engines....HO-12-70 or
12H-65R.
IHC RD-engines...HDD-5, SH-90
Wau engines...HDD 4 or HH-150R
GMC engines4D-153
Cum enginesRD-153

Terminal Grounded

All models Pos

FRONT END

Toe-In

All models 0-1/8 in.

Caster

All models 2 deg

Camber

All models 1 deg

King Pin Slant

All models 8 deg

VALVES

Operating Tappet Clearance

IHC engines...Inlet & Exhaust:
.024-.026 in.
Wau 145GK...Inlet: .012-.014 in.
Exhaust: .023-.025 in.
Wau 145GKB...Inlet: .012-.014 in.
Exhaust: .029-.030 in.

Seat Angle

Engine

IHC BD-240, RD-501....
Inlet & Exhaust: 30 deg
Other IHC engines....
Inlet & Exhaust: 15 deg
Wau engines....
Inlet & Exhaust: 30 deg

Face Angle

Engine

IHC BD-240....
Inlet & Exhaust: 30 deg
Other gasoline engines....
Inlet & Exhaust: 45 deg

TENSIONS

Manifold Bolt

All IHC engines....	25-30 lb-ft
Wau engines	30 lb-ft

Head Bolt

Engine

IHC BD-240.....	85-95 lb-ft
IHC BD-282, BD-308...	75-85 lb-ft
Other IHC engines...	100-110 lb-ft
GMC engines.....	165-175 lb-ft

IHC RD-372, RD-406, RD-450....	
Inner: 83-88 lb @ 1.503 in.	
Outer: 133-141 lb @ 1.706 in.	
IHC RD-501....	
Inner: 82-88 lb @ 1.75 in.	
Outer: 160-170 lb @ 1.75 in.	
Wau 145GK....	
Inner: 75-87 lb @ 2 1/16 in.	
Outer: 109-127 lb @ 2 3/8 in.	
Wau 145GKB....	
Inner: 75-87 lb @ 2 1/16 in.	
Outer: 109-127 lb @ 2 1/16 in.	
GMC engines....	
84 1/2-89 1/2 lb valve open	

VALVE SPRINGS

Free Length

Engine

IHC BD-240	2 11/16 in.
IHC BD-282, BD-308.	2 3/16 in.
IHC RD-372, RD-406, RD-450....	
Inner: 2 11/32 in.	
Outer: 2 9/16 in.	
IHC RD-501...Inner: 2 3/4 in.	
Outer: 2 13/16 in.	
Wau engines...Inner: 3 3/32 in.	
Outer: 3 7/16 in.	

Pressure

At Open Length

Engine

IHC BD-240....	
149-158 lb @ 1 11/16 in.	
IHC BD-282, BD-308....	
186-196 lb @ 1 15/32 in.	

CAPACITIES

Crankcase

IHC BD-series	7 qt
IHC RD-series	9 qt
Wau engines	18 qt
GMC 3-71	18 qt
GMC 4-71	21 qt
GMC 6-71	25 qt
Cum JT-6-B	16 qt
Other Cum engines	28 qt

Transmission

F51C	12 pt
2B-5A1120	29 pt
2B-5A43	16 pt
2B-10A1120	32 pt
2B-R46	17 pt
2B-5A62, 5C62, 5C72....	24 pt
2B-10CA65	31 pt

2B-R96	33 pt
35 (incl. transfer case)...	40 pt

Auxiliaries

271, 272, 371, 372	8 pt
273, 373	10 pt

Rear Axle

13B	6 pt
13C	9 pt
23, 33, 33A	16 pt
53	24 pt

Cooling System

Truck Model

Blue Ox, 140, 140COE,	
U-150	26 qt
181, 181COE	28 qt
182, 182COE, 202,	
202COE	30 qt
232, 232COE, 6-222,	
6-282	30 qt
284, 284COE, M284,	
6-324	31 qt
A-329, 408, 408COE,	
409, 409COE, 6-609..	53 qt
All others	33 qt

LUBRICATION

Crankcase

All gasoline engines...Use heavy Duty engine oil (MIL-L-2104-A). Above 70 deg use SAE 40. From 50 to 70 deg use SAE 30 for light duty, SAE 40 for heavy duty. From 30 to 50 deg use SAE 20/20W for light duty, SAE 30 for heavy duty. Below 30 deg use SAE 20W. GMC diesels...For general service use SAE 30 engine oil. From 0 to 30 deg in continued cold use SAE 20W. Below 0 deg use SAE 10W.

Cummins diesels...Above 80 deg use SAE 30 straight engine oil. From 20 to 80 deg use SAE 20 straight engine oil. Below 20 deg use SAE 10W straight engine oil.

Transmission

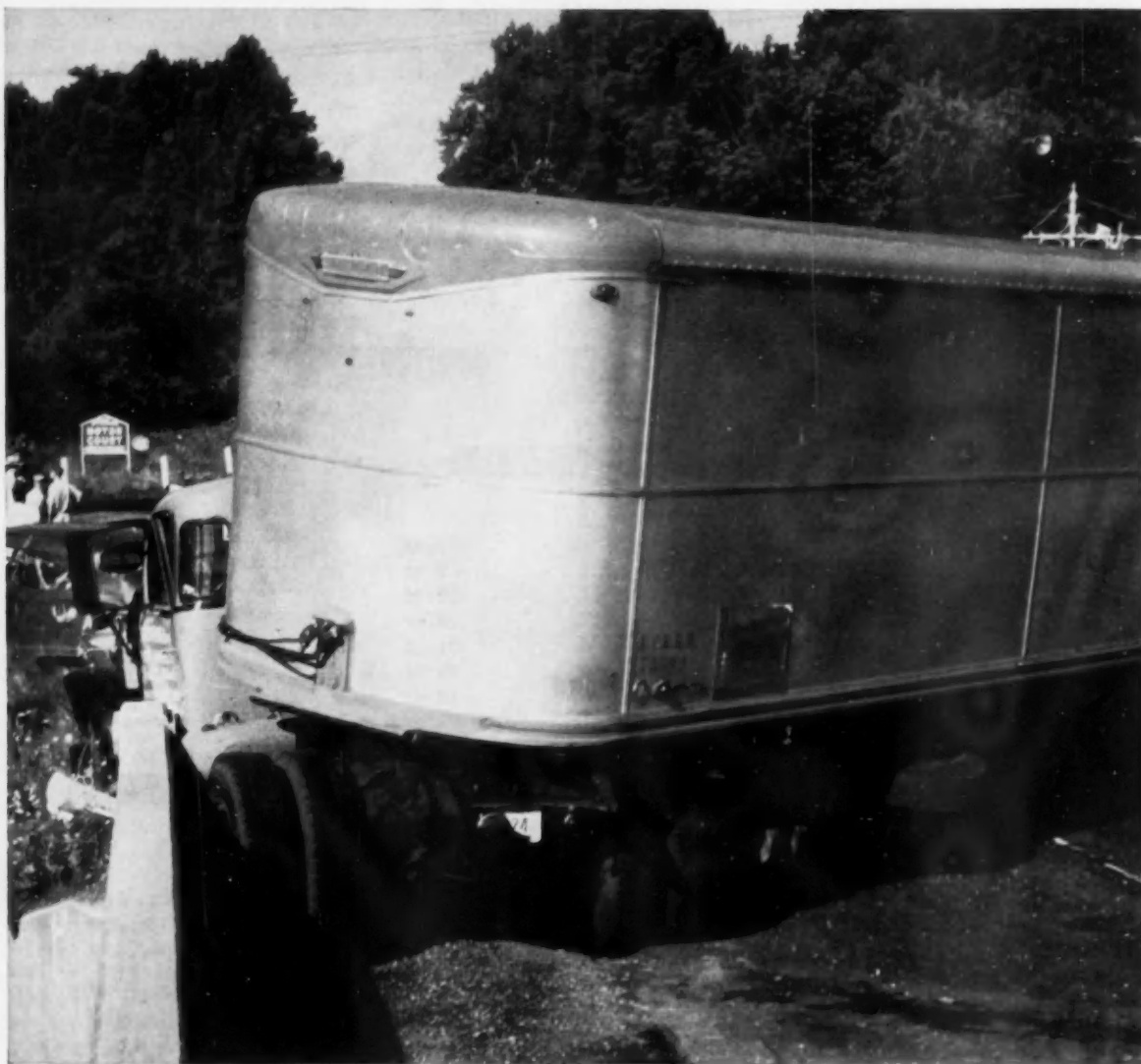
All models...Use straight mineral oil (FWD Spec. No. T-46-1); Summer: SAE 140; Winter: SAE 90.

Rear Axle

All models...Multi-purpose lube (MIL-L-2105); Summer: SAE 90; Winter: SAE 80.



"I think th' lip should be in shape by now—
Blow th' fuel line!"



YOU CAN'T TELL CHEAP BRAKE BLOCKS JUST BY LOOKING

No truck operator would knowingly install cheap brake blocks. They constitute a serious safety hazard and they're a poor investment in terms of cost-per-mile service. Yet a sizeable amount of inferior blocks are being currently sold for replacement.

How does it happen? What can be done about it?

EASY TO IMITATE. There are no laws or regulations governing the quality of brake blocks sold for replacement. It would be legal to make them of cardboard as long as the size and shape were right! Unfortunately, it's very easy to imitate the *look* of quality blocks. And it's very hard for anyone, except a brake lining engineer, to tell the difference

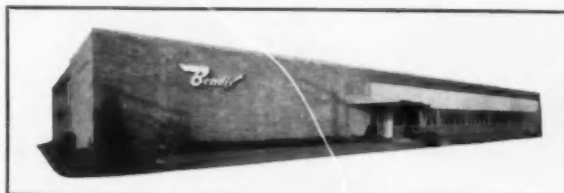
between the best and the worst by the appearance and feel of the material. Price is no guide, either. Some of the worst stuff costs the same as quality blocks.

TRAGEDY AND WASTE. Cheap blocks are slapped together by irresponsible operators, often using makeshift equipment and methods. They know or care nothing about standards of manufacture and quality control. Their only concern is to make a good profit by keeping their investment in equipment and materials to a minimum. They let someone else worry about their end product, which so often causes the tragedy of traffic fatalities and the waste of damaged trucks and merchandise.

QUALITY BLOCKS COST LESS. Another thing, cheap brake blocks are the most expensive from a time-cost standpoint. Even if they don't cause an accident, they force your trucks into the shop for maintenance more often. Although you may pay a few cents more for top quality blocks, (and you don't always have to) you'll be dollars ahead in terms of longer brake service life and less down time.

We believe the inferior brake block makers can be run out of business if truck operators, brake mechanics and wholesalers are aware of their shoddy operations. Here's how you can help: specify your blocks *by name*—the name of any reliable brake block manufacturer.

IT TAKES MORE THAN A BUCKET AND A KITCHEN STOVE TO MANUFACTURE QUALITY BRAKE BLOCKS



Marshall-Eclipse Division, manufacturers of Bendix-Eclipse brake blocks and lining, Troy, New York.



Test truck measures braking characteristics of Bendix-Eclipse brake blocks under all types of operating conditions.



Laboratory control assures that the high quality of Bendix brake blocks and lining is uniformly maintained.



Specially designed dynamometer evaluates friction, wear, fade and durability of Bendix brake blocks and lining.

Brake blocks are one of the most important parts on a truck from a safety standpoint. It takes an engine weighing hundreds of pounds to propel over twenty tons at speeds close to a mile a minute. Yet, brake blocks—a product weighing less than 50 pounds—are called on to reverse this process in a matter of seconds.

It's obvious, then, that a dependable brake block manufacturer has to know what the score is. Pressed cardboard will stop a truck traveling at slow speeds—if you have unlimited

space in which to stop, and you only have to stop once.

Producing a product that meets today's tremendous braking requirements calls for years of experience, continuous research, big financial investments, top engineering talent, vast testing facilities, and above all, skill. Marshall-Eclipse is strong on all counts—especially skill. Practically every automotive manufacturer in this country recognizes the superior quality of Bendix-Eclipse brake lining. It has been selected for original equip-

ment on more new cars and trucks than any other make. And the decision of these vehicle manufacturers to use Bendix-Eclipse results from their own exhaustive laboratory and proving ground tests.

Yes, it takes more than a bucket and a kitchen stove to manufacture quality brake blocks and lining. There can be no compromise with know-how when a life may be at stake. Play it safe. Order your stock of Bendix-Eclipse* Brake Blocks and Lining now. Then you can be sure.

*TRADEMARK

BENDIX-ECLIPSE

Marshall-Eclipse Division

Troy, New York



TRUCK DATA

GMC

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)	
270	269.5	6	3 25/32	x 4
302	301.6	6	4	x 4
336	336.1	8	3 7/16	x 3 9/16
370	370.7	8	4	x 3 11/16
503	502.7	6	4 9/16	x 5 1/8

Diesels

4-71	283.7	4	4 1/4	x 5
6-71SE	425.6	6	4 1/4	x 5
6-71T	425.6	6	4 1/4	x 5

Oil Pressure

Engine

370...5 psi, minimum @ idling speed.

All other gasoline engines...35-40 psi @ 1000 rpm.

All diesels...25 psi, minimum @ idling speed.

Compression Pressure

Engine

270..... 140 psi @ 125 rpm

503..... 115 psi @ 125 rpm

All other gasoline engines...125 psi @ 125 rpm

IGNITION

Cam Angle

Engine

270, 302 28-35 deg

336, 370 30 deg

503 31 deg

Breaker Point Gap

All models016 in.

Spark Occurs

(Degrees Before Top Center)

Engine

270, 302 5 deg

336 3 deg

370	TC @ 400 rpm
503	6 deg @ 450 rpm

SPARK PLUGS

Make & Type

Engine

270, 302, 336, 502...

AC 44 Com

336 H.D. AC 45

370 AC C-43 Com

Size

All models 14 mm

Gap

336 H.D.035 in.

All others030 in.

Torque

Engine

270, 302 15-20 lb-ft

All others 23-27 lb-ft

VALVES

Operating Tappet Clearance

270, 302 Inlet: .012 in.

Exhaust: .020 in.

503 Inlet: .012 in.

Exhaust: .018 in.

336, 370 Zero

Seat Angle

Engine

270 Inlet: 30 deg

Exhaust: 30 deg

302, 336, 503.... Inlet: 30 deg

Exhaust: 45 deg

370 Inlet: 45 deg

Exhaust: 45 deg

4-71, 6-71 30 deg

Face Angle

Engine

270 Inlet: 30 deg

Exhaust: 30 deg

302, 503 Inlet: 30 deg

Exhaust: 45 deg

336 Inlet: 29 deg

Exhaust: 44 deg

370 Inlet: 45 deg

Exhaust: 45 deg

TENSIONS

Manifold Bolt

Engine

270, 302 25-30 lb-ft

336 45 lb-ft

370 Inlet: 25-30 lb-ft

Exhaust: 22-26 lb-ft

503 70-75 lb-ft

Head Bolt

Engine

270, 302 90-100 lb-ft

336 90-95 lb-ft

370 60-70 lb-ft

503 75-80 lb-ft

4-71, 6-71 165-175 lb-ft

VALVE SPRINGS

Free Length

Engine

270, 302 2 1/8 in.

336 Inner: 1 11/16 in.

Outer: 2 in.

Pressure

Engine

270, 302...124-140 lb compressed to 1.505 in.

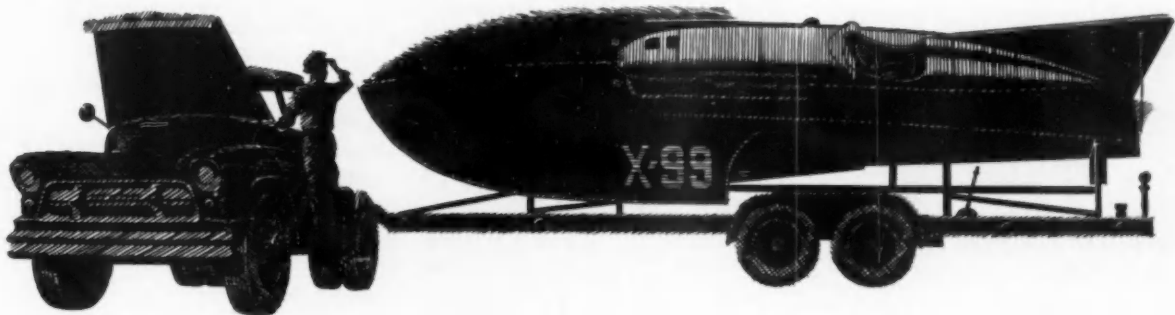
336...Inner: 94-100 lb compressed to 1.065 in.; Outer: 117-127 lb compressed to 1.146 in.

370...183-197 lb compressed to 1.480 in.

503...Inner: 17-23 lb compressed to 1.625 in.; Outer: 45-53 lb compressed to 1.875 in.

(TURN TO PAGE 112, PLEASE)

The pit stop that cost the race



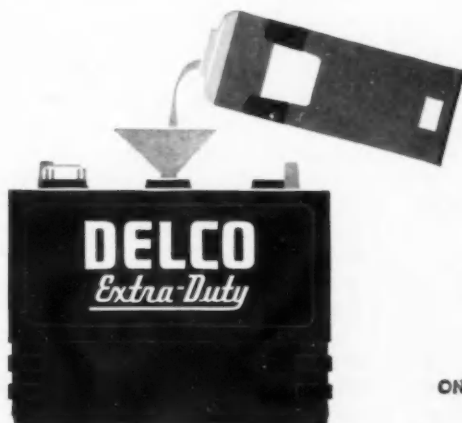
Dead-battery delay means loss in any trucker's race for profits. Play safe with a Delco Extra-Duty... keep moving at lowest battery cost per mile of operation!

"Lowest cost per mile of operation" is no mere claim about Delco Extra-Duty batteries. It is fact, proved by cost-conscious truckers from coast to coast. The Delco Extra-Duty gives more go-power, dollar for dollar, because it never lets you down throughout its long-life warranty which is good all over the U.S. and Canada.

The reason for such dependability is unique with Delco: Only after extreme torture tests at the General

Motors Proving Grounds was the warranty established! So you know in writing that Delco Extra-Duty batteries will add up to savings in operation—not loss in delay. Shouldn't your profits have this extra-duty protection?

Wet or dry charge, get the battery backed by both General Motors and Delco—the Delco Extra-Duty. Its low cost in fleet use has made it the No. 1 preference among America's truckers.



Quality built by Delco-Remy
available everywhere through independent distributors
associated with ...



ON CBS TV—"High Adventure with Lowell Thomas" • ON CBS RADIO—Lowell Thomas Newscast

TRUCK DATA

GMC

Continued from Page 110

BATTERY

Amp-Hour Capacity

Truck Model

100-500 series:

SFM 460	205
Other S-models	72
Others with 6-cyl.	53
Others with 8-cyl.	60

550-970 series:

Diesel R-models	150
Other Diesels	205
All gasoline models	72

Plates Per Cell

Truck Model

100-500 series:

SFM 460	27
Other S-models	11
Rest of series	9

550-970 series:

Diesel R-models	19
Other Diesels	27
All gasoline models	11

SAE Group

Truck Model

100-500 series:

SFM 460	8DR 205
Other S-models ..	3SMR 72
Others with 6-cyl	2SMR 53
Others with 8-cyl	558

550-970 series:

Diesel R-models	4DR150
Other Diesels	8DR205
All gasoline engines...	3SMR 72

Terminal Grounded

All models	Neg
------------------	-----

FRONT END

Toe-In

Truck Model

100, 100-8	1/16-3/16 in.
150 thru 370	1/16-1/4 in.

450, 500	1/16-3/16 in.
All others	1/8 -1/4 in.

Camber

Models 100 thru 370..	1 1/2 deg
All others	1 deg

Caster

All F-models	2 1/2 deg
All others	1 1/2-1 1/2 deg

CAPACITIES

Crankcase

270	8 qt
with filter:	9 1/2 qt
302	8 qt
with filter:	10 1/2 qt
336, 370	5 qt
with filter:	6 qt
503	12 qt
4-71	20 qt
6-71	22 qt

Transmission

GMC SM318	1 1/2 pt
GMC SM319	2 3/4 pt
Warner T89B	2 3/4 pt
GMC SM420	6 pt
New Process 540, 541.	10 pt
Spicer 6852, 6853	17 pt
Fuller R46	17 pt
Fuller R96	36 pt

Auxiliaries

Spicer 5831	4 pt
Spicer 6041	8 pt
Spicer 8341	12 pt

Hydra-Matics

177CA, 210U, 300GH..	18 pt
177CA (with 8-cyl)...	20 pt
210 UC, 300 GHC	19 pt
330 GP	24 pt
350 GN	28 pt
All Torqmatics	22 pt

Rear Axle

GMC HO72	6 1/2 pt
GMC H110	14 pt
GMC H150	19 1/2 pt
Spicer 45	3 1/2 pt
Spicer 60	5 1/2 pt
Timken B100	10 pt

Two-Speed

Eaton 1350	13 pt
Eaton 17800, 17801,	
18803	22 pt
Eaton 19503	24 pt
GMC T150	16 1/2 pt
Timken F341	16 pt
Timken G361, H350 ...	24 pt
Timken H340	22 pt
Timken Q390	30 pt
Timken R390	60 pt

Single Reduction

Eaton 1790A, 1791A...	22 pt
Eaton 1893	21 pt
Eaton E1911	24 pt
Timken H140	20 pt
Timken R140	30 pt

Double Reduction

Eaton 2696	22 pt
Timken R230, RT240..	36 pt
Timken U200	38 pt

Tandems

Eaton 22M...	
Front & Rear:	12 pt
Eaton 28M...	
Front & Rear:	17 pt
Eaton 34M ....Front:	28 pt
Rear:	31 pt

Timken (capacity of each axle)

SFDD, SLDD	28 pt
SQDD	22 pt
SQW	40 pt
SW456, SW3020	28 pt
SW3458	33 pt

Torque Dividers

Eaton 22M, 28M	9 pt
Eaton 34M	3 pt

Cooling System

Truck Model

100 thru 250 series....	17 qt
With 8-cyl engine:	25 qt
300 series	22 qt
With Hydra-Matic	23 qt
P350	17 qt
350	23 qt
With Hydra-Matic:	24 qt
350-8	30 qt
With Hydra-Matic.	31 qt
370	23 qt
With Torqmatic:	22 qt
370-8...with Torqmatic:	29 qt
450	23 qt
With Torqmatic:	22 qt
450-8	30 qt
With Torqmatic:	29 qt
SFM460	19 qt
W500	30 qt
MW500	29 qt

500, 600 series	24 qt
With Torqmatic:	23 qt
630-970 series	29 qt
Diesel models.....4-cyl:	30 qt
6-cyl:	39 qt

LUBRICATION

Crankcase

All gasoline engines...Use "DG" type Heavy Duty engine oil for normal operation, "DS" type for severe stop-start operations in cold weather. Above 90 deg use SAE 30; From 32 to 90 deg use SAE 20 or 30; From 80 to 10 deg use SAE 20W; From 60 to -10 deg use SAE 10W; Below 10 deg use SAE 5W.

All diesel engines...Use "DG" type Heavy Duty engine oil for normal operation, "DS"

type for severe stop-start operations in cold weather. Above 32 deg use SAE 30; Between -10 and 60 deg use SAE 20W; Below 10 deg use SAE 10W.

Transmission

GMC & New Process...Use Multi-purpose gear lube (MIL-L-2105) summer and winter.

Spicer...Use "DG" type SAE 50 engine oil all year.

Fuller...Use best quality straight gear oil. Summer: SAE 140; Winter: SAE 90.

Hydra-Matic...Use Type A automatic transmission fluid.

Torqmatic...Use Type C automatic transmission fluid. In extreme cold use Type A, but do not mix the two types of fluid.

Auxiliary...Use "DG" type SAE 50 engine oil all year.

Rear Axle

Worm type...Use worm gear lubricant. Above 0 deg use SAE 140; Below 0 deg use SAE 90.

Others...Use Multi-Purpose gear lube (MIL-L-2105) all year.

MODEL NUMBERS

Truck Model...On all models see plate on cab left door hinge panel.

Engine Model...Models 270 and 302—on crankcase behind distributor. 336—on right side of block below the manifold. 370—on top left side of block. 503—on left rear corner of crankcase. 4-71 — on right rear corner of block. 6-71—on front right of block.

Transmissions and Rear Axles...see plate in dash compartment.

OSHKOSH

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)
Gasoline			
IHC RD-406	406	6	4 $\frac{3}{8}$ x 4 $\frac{1}{2}$
IHC RD-450	450	6	4 $\frac{3}{8}$ x 5
IHC RD-501	501	6	4 $\frac{1}{2}$ x 5 $\frac{1}{4}$
Con R-6513	513	6	4 $\frac{1}{2}$ x 5 $\frac{3}{8}$
Con R-6572	572	6	4 $\frac{3}{4}$ x 5 $\frac{3}{8}$
Con R-6602	602	6	4 $\frac{7}{8}$ x 5 $\frac{3}{8}$
Wau 145GKB	779	6	5 $\frac{1}{4}$ x 6
H-S 6182-G-1	1091	6	5 $\frac{3}{4}$ x 7
Diesels			
Cum JT-6-B	401	6	4 $\frac{1}{8}$ x 5
Cum 6-HB	672	6	4 $\frac{7}{8}$ x 6
Cum HRFB-600	743	6	5 $\frac{1}{8}$ x 6
Cum HRBB-600	743	6	5 $\frac{1}{8}$ x 6
Cum NH-600	743	6	5 $\frac{1}{8}$ x 6
Cum NHRS-600	743	6	5 $\frac{1}{8}$ x 6

Oil Pressure

IHC engines...
 30-40 psi @ 1500 rpm
Wau 145 GKB...
 40 psi @ 2400 rpm

Con engines..... 50-60 psi
H-S 6182-G-1...

10 psi @ 350 rpm
Cum engines...30-50 psi @ governed speed.

IGNITION

Cam Angle (Dwell)

H-S 6182-G-1	27-37 deg
All others	31-37 deg

Breaker Point Gap

IHC engines .....	.019-.024 in.
Con engines .....	.022 in.
Wau 145 GKB .....	.018 in.
H-S 6182-G-1 .....	.021 in.

SPARK PLUGS

Make & Type

IHC engines...AC 43 Com, CH J-6 or AL A-5
Con engines CH 8 Com
Wau 145 GKB..... CH H-9
H-S 6182-G-1...Intake side: CH 10 Com; Exhaust side: CH 6 Com

Size

IHC, Con & H-S engines	18 mm
H-S 6182-G-1	14 mm

Gap

H-S 6182-G-1 .....	.016 in.
All others .....	.025 in.

(TURN TO NEXT PAGE, PLEASE)

TRUCK DATA

OSHKOSH

Continued from Page 113

VALVES

Operating Tappet Clearance

IHC engines...Inlet & Exhaust:
.020-.022 in.

Con engines... Inlet: .018 in.
Exhaust: .024 in.

Wau 145 GKB (cold)...
Inlet: .013 in.
Exhaust: .030 in.

H-S 6182-G-1...Inlet: .021 in.
Exhaust: .031 in.

BATTERY

Amp-Hour Capacity

All models with Cummins or Hall-
Scott engines 200
All others 153

Terminal Grounded

All models Pos

SAE Group

All models with Cummins or Hall-
Scott engines 7D
All others 4H

FRONT END

Toe-In

All models 0-1/8 in.

Camber

W2200 series, WA-906.. 1/2 deg
All others 1 deg

Caster

All models 1 deg

King Pin Slant

All models 3 deg

CAPACITIES

Crankcase

IHC engines 9 qt

Con engines 10 qt
Wau 145 GKB 18 qt
H-S 6182-G-1 16 qt
Cum JT-6-B 16 qt
Other Cum engines 35 qt

Transmission

Truck Model

W-216, W-316, W-416.... 16 pt
All others 24 pt

Cooling System

Truck Model

W-216, W-316, W-416,
W-516 40 qt
W-816, 817, 826, 827,
WA906 42 qt
W-826 (6x6) 42 qt
WA-2208, WA-2209 66 qt
WA-2206 75 qt
W-2211 80 qt
All others 54 qt

LUBRICATION

Crankcase

IHC engines...Above 32 deg use
SAE 40; Between 10 and 32

deg use SAE 20W. Below 10
deg use SAE 10W.

Con R6513...Above 32 deg use
SAE 30; Between 0 and 32
deg use SAE 20; Below 0 deg
use SAE 10.

Con R6602...Above 80 deg use
SAE 30; Between 20 and 80
deg use SAE 20; Below 20
deg use SAE 10.

H-S 6182-G-1...Above 32 deg use
SAE 30; Below 32 deg use
SAE 20.

Wau 145 GKB...Above 70 deg use
SAE 50; Between 50 and 70
deg use SAE 40; Between 30
and 50 deg use SAE 20; Be-
low 30 deg use SAE 20W.

Cummins engines...Above 80 deg
use SAE 30; Between 20 and
80 deg use SAE 20; Below 20
deg use SAE 10.

Transmission

All models...Use straight mineral
oil gear lubricant. In Sum-
mer use SAE 140; in Winter
use SAE 90.

Rear Axle

Single reduction....Use Hypoid
gear lubricant; SAE 140 in
Summer, SAE 90 in Winter.
Double reduction....Use straight
mineral oil gear lubricant;
SAE 140 in Summer, SAE 90
in Winter.



"I've got 'er all back together but she seems to be
hittin' on FIVE!"

NOW!

ONE SOURCE FOR ALL YOUR LUBRICATION GUNS



★ UNIVERSAL'S 8 Versatile "Easy Grip" Units



12,000 Pound GREASE GUN

This gun will build up a pressure of 12,000 pounds when needed. Swivel couplers, when applied to the grease fitting, will lock tightly, and a mere left or right wrist motion will easily disengage the coupler from the fitting collar.



SPRING PRIMED LEVER GUN

This hand gun builds up a pressure of 10,000 pounds. The barrel holds 15 oz. of grease; also it is adapted to cartridge grease loading or self filling. This gun comes with a hydraulic coupler and a fitting for filling. Adapters for any types of fittings are also available.



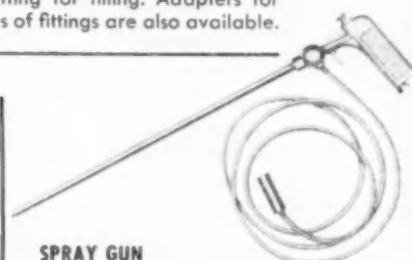
SUCTION GUN

This gun, ruggedly constructed, has many purposes, such as draining and filling of wet clutches, transmissions, differentials, and any place where a fluid lubricant is required. A knurled barrel and tilted handle assure a perfect gripping for hand fit.



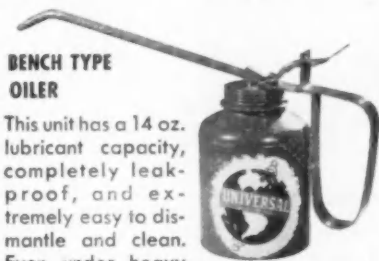
PISTOL OILER

This controlled flow oiler can give a drip or steady stream for lubrication. Ruggedly constructed, it is completely leakproof, and more important, all parts are replaceable.



SPRAY GUN

This Universal Spray Gun is designed to give you a simple, efficient, and more important, more economical means of cleaning engines and other equipment. It is equipped with a six foot synthetic rubber feed tube, weighted for immersion in your cleaning solution. It will also spray light paints and insecticides.

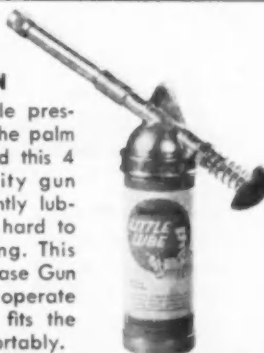


BENCH TYPE OILER

This unit has a 14 oz. lubricant capacity, completely leak-proof, and extremely easy to dismantle and clean. Even under heavy duty service, this unit will give a continuous oil flow.

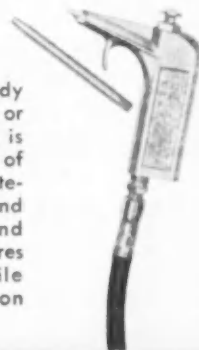
PUSH TYPE GREASE GUN

With a little pressure from the palm of the hand this 4 oz. capacity gun can efficiently lubricate any hard to reach fitting. This handy Grease Gun is easy to operate and load, fits the hand comfortably.



AIR BLOW GUN

This gun, a handy tool for industry or service station, is light in body, of high strength materials to withstand abuse. Full hand pistol grip assures complete mobile effectiveness on your job.



UNIVERSAL LUBRICATING SYSTEMS, INC.

442 Allegheny Ave., Oakmont, Pennsylvania

TRUCK DATA

INTERNATIONAL

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore and Stroke (in.)
BD-220	220	6	3 9/16 x 3 11/16
BD-240	240	6	3 9/16 x 4 1/64
BD-264	264	6	3 11/16 x 4 1/8
BD-282	282	6	3 13/16 x 4 1/8
BD-308	308	6	3 15/16 x 4 1/2
RD-372	372.066	6	4 3/8 x 4 1/8
RD-406	405.891	6	4 3/8 x 4 1/2
RD-450	450.990	6	4 3/8 x 5
RD-501	500.976	6	4 1/2 x 5 1/4
V-401	401	V-8	4 1/8 x 3 3/4
V-461	461	V-8	4 1/8 x 4 5/16
V-549	549	V-8	4 1/2 x 4 5/16
Cum JBS-600	401	6	4 1/8 x 5
Cum JT-600	401	6	4 1/8 x 5
Cum N series	743	6	5 1/8 x 6
Cum H series	743	6	5 1/8 x 6

For Cummings engine service data, see page 166

Oil Pressure

Engine

BD-220, BD-240, BD-264...	30-40 psi @ 1500 rpm
BD-282, BD-308, RD series...	35-45 psi @ 1500 rpm
V-8 engines...	50-55 psi @ 1500 rpm

Spark Occurs

(Degrees Before Top Center)

Engine

BD-220, BD-240	4 deg
BD-264	2 deg
BD-282	6 deg
BD-308	3 deg
V-401	5 deg
V-461, V-549	7 deg

IGNITION

Cam Angle (Dwell)

BD and RD engines...31-37 deg

Breaker Point Gap

Engine

BD engines	New: .019 in. Reset: .016 in.
RD engines	.019-.024 in.
V-8 engines	New: .016 in. Reset: .014 in.

SPARK PLUGS

Make & Type

BD engines...	AC 45 Com, CH J-8, or AL A-7
RD engines...	AC 43 Com, CH J-6, or AL A-5

Size

All 6-cyl engines... 14 mm

Gap

All 6-cyl engines..	.028-.033 in.
All 8-cyl engines..	.025-.030 in.

Torque

All 6-cyl engines... 28-30 lb-ft

VALVES

Operating Tappet Clearance

Engine

BD-220, BD-240, BD-264... Inlet and Exhaust: .024-.026 in.

BD-282, BD-308, RD engines... Inlet and Exhaust: .020-.022 in.

V-8 enginesZero

Face Angle

Engine

BD-220, BD-240, BD-264... Inlet and Exhaust: 30 deg

BD-282, BD-308, RD engines... Inlet: 15 deg, Exhaust: 45 deg

V-8 engines... Inlet and Exhaust: 45 deg

TENSIONS

Cylinder Head Bolt

Engine

BD-220, BD-240, BD-264...	85-95 lb-ft
BD-282, BD-308...	75-85 lb-ft
RD Engines	100-110 lb-ft
V-8 engines	80-90 lb-ft

VALVE SPRINGS

Free Length

Engine

BD-220, BD-240, BD-264...	2 11/16 in.
BD-282, BD-308...	2 3/16 in.
RD engines... Inner:	2 11/32 in.
Outer:	2 9/16 in.
V-8 engines... Inner:	2 9/32 in.
Outer:	2 19/32 in.

Pressure

Valve open

Engine

BD-220, BD-240, BD-264...	149-158 lb
BD-282, BD-308	128-190 lb
RD engines... Inner:	83- 88 lb
Outer:	133-141 lb
V-8 engines... Inner:	86- 93 lb
Outer:	121-129 lb

(TURN TO PAGE 118, PLEASE)



How to get more miles from your tires

ECO Tireflators®

give Exact Pressures
automatically

Cost-conscious fleet operators know how proper tire inflation cuts "down-time" losses, helps keep tight schedules and increases tire life.

Eco Tireflators *automatically* inflate tires to proper pressures, end guessing and under-and-over inflation.

No matter how large or small your fleet is, Eco Tireflators save you money in tire costs every day of the year. They cut labor costs, too, because there is no need to "inflate and check" and no time lost hunting for gages.

Wall, post and remote control models let you put Eco Tireflators wherever they serve you best.



JOHN WOOD COMPANY

Bennett Pump Division • Muskegon, Michigan

IN CANADA: JOHN WOOD COMPANY LIMITED • Toronto • Montreal • Winnipeg • Vancouver

TRUCK DATA

INTERNATIONAL

Continued from Page 116

CAPACITIES

Crankcase

Engine

BD-220, BD-240, BD-264...	6 qt
BD-282, BD-308	7 qt
RD engines	9 qt
V-8 engines	10 qt

Transmission

T1	2½ pt
T2	3½ pt
T5	6 pt
T10	5 pt
T15	7 pt
T19, T22	10 pt
T26	20 pt
T30, T31, T40, T41	12 pt
T50, T51	19 pt
T60, T61, T62, T63	24 pt
T70, T71, T72, T73	26 pt
T75, T76...	
With RD engines:	17 pt
With V-8 engines:	19 pt

Auxiliary Transmission

AT501	10 pt
AT510	6 pt
AT519, AT520	8 pt
AT539	12 pt

Rear Axle

RA-1, RA-8	3 pt
RA-5, RA-10	4 pt
RA-15, RA-20	5½ pt
RA-25	9½ pt
RA-30, RA-31	8 pt
RA-35, RA-40	11 pt
RA-44...	

First production: 16 pt
Later production: 24 pt

RA-45	22 pt
RA-46, RA-47	31½ pt
RA-50	21 pt
RA-56, RA-57	31 pt
RA-60	23 pt
RA-70	36 pt
RA-120	13 pt
RA-125, RA-130, RA-131	11 pt

RA-135	15½ pt
RA-145	17 pt
RA-146	

First production: 15½ pt
Later production: 22 pt

RA-150	18 pt
RA-151, RA-152	28½ pt
RA-155	24 pt
RA-156, RA-157	29½ pt
RA-160, RA-166, RA-167	29 pt
RA-165	32 pt
RA-170	34 pt
RA-171, RA-172	51½ pt
RA-175	37 pt
RA-240	20 pt
RA-245, RA-250	19 pt
RA-270	36 pt
RA-275	38 pt
RA-301 (tandem)	

Forward: 11 pt
Rear: 11 pt

RA-305 (tandem)	
Forward:	14 pt
Rear:	14 pt

RA-310 (tandem)	
Forward:	28 pt
Rear:	33 pt

RA-318 (tandem)	
Forward:	27 pt
Rear:	24 pt

RA-315 (tandem)	
Forward:	28 pt
Rear:	28 pt

Single Reduction Bogies

RA-305 (each axle)	14 pt
RA-310	
Forward:	23 pt
Rear:	25 pt

RA-315 (each axle)	28 pt
RA-320	
Forward:	20 pt
Rear:	21 pt

RA-357 (each axle)	22 pt
--------------------	-------



"Now tell me sir, just when did you stop sleeping on top of your bed?"

Cooling System

Truck Model

A-100—A-130, A-120 (4x4)	15 qt
A-140—A-160, AC-150, AC-160	16 qt
A-140 (4x4), A-160 (4x4)	16 qt
A-170, A-180, AC-170, AC-180	19 qt
ACF-170, AC-170 (4x4), AC-180 (4x4)	19 qt
A-175, AC-175, ACF-175	20 qt
ACF-180, AC-1890	20 qt
R-185, R-190, R-210	28 qt
RF-190, RF-210	28 qt
R-200, RF-200	26 qt
R-220, RF-230	30 qt
ACO series	46 qt

LUBRICATION

Crankcase

Engine

BD & V-8 engines...Above 32 deg use SAE 30. Between 10 and 32 deg use SAE 20W. Below 10 deg use SAE 10W.

RD engines...Above 32 deg use SAE 40. Between 10 and 32 deg use SAE 20W. Below 10 deg use SAE 10W.

Transmission

Standard...Above 0 deg use SAE 90 straight mineral oil. Below 0 deg use SAE 80.

Automatic...Type "A" fluid Auxiliary...Above 0 deg use SAE 90 straight mineral oil. Below 0 deg use SAE 80.

Rear Axles

All models...Above 40 deg use SAE 140. Below 40 deg use SAE 90.

MODEL NUMBERS

Truck Model...On all models see plate on left side cab door inner panel.

Engine Model...On 6-cyl engines number is stamped on crankcase, right side, upper front. On 8-cyl engines it is on left bank upper front.

Rear Axle...See specification card in vehicle.

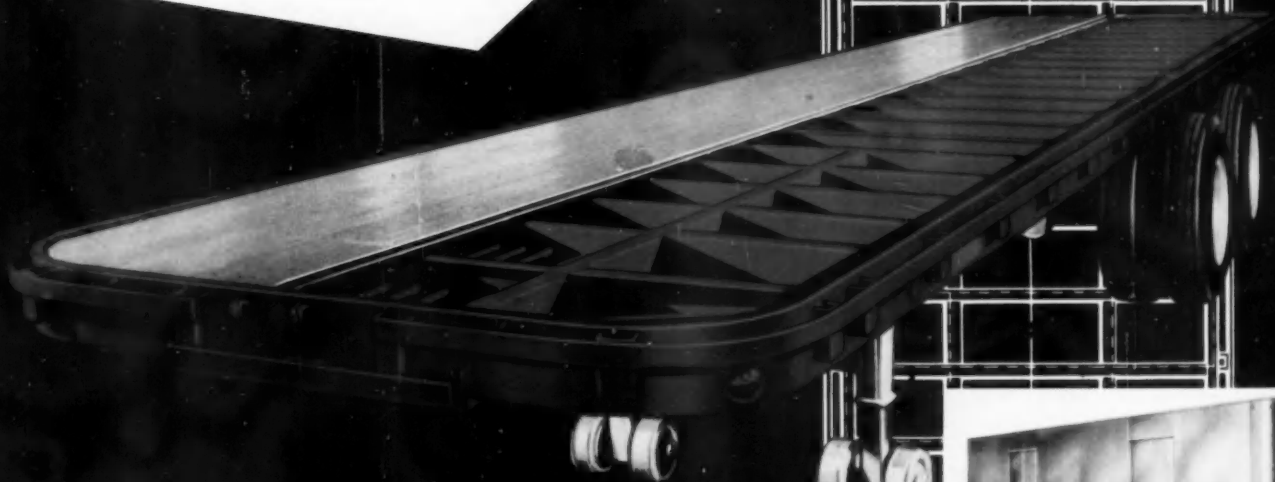
Transmission...See specification card in vehicle.

FROM CHASSIS TO REFRIGERATED VAN

One for Every Need...



LIGHTWEIGHT
RUGGED . . . HEAVY-DUTY
TRAILERS

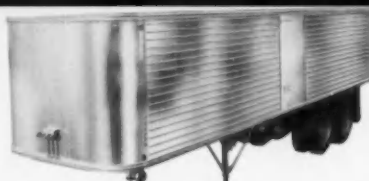


THE TRAILERS THAT OUT-PULL ALL OTHERS
IN PERFORMANCE AND LONG LIFE WITH
ADDED PAYLOAD SPACE AND MORE
MAINTENANCE-FREE MILES
... ASK THE DRIVER WHO PULLS ONE

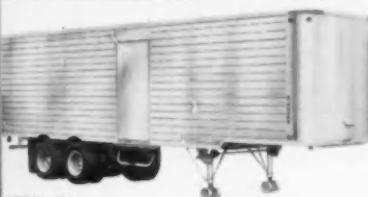




MODEL KAX
VOL. WITH OUTSIDE DOORS



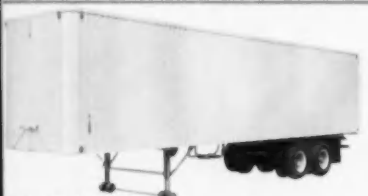
MODEL KA
REGULAR-VOLUME VAN



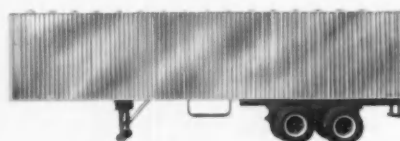
MODEL KAK
I-VOLUME VAN



MODELS TAP & TSP
FRAMELESS CARGO VAN



MODELS SA & SS
R-VOLUME VAN



MODELS SAO & SSO
SUPER-VOLUME OPEN-TOP

ALUMINUM AND STEEL



MODEL KAG
ALUMINUM PANEL FRUIT & GRAIN



MODEL TSG
STEEL PANEL FRUIT & GRAIN



TRAILERS ARE

TOPS *in Quality...*

*more maintenance-free miles in every Kingham trailer...
pulls easier...ask the driver who pulls one!*

There are 47 different Kingham models listed in these four pages of which can be furnished with many variations. *New models to come* are now on the drawing board and will be out in the near future... be watching for them.

The new Kingham is now "King of the Road"... watch the "Kings" pull by. Each one is built to give *many uninterrupted years* of constant service on the road. They are *built to last*

... designed to have less weight, assuring you a *bigger payload capacity*... *savings* on tires and fuel because of the ease in Kingham *pullability*... *safest* on the road with the Kingham Super Brakes, and many other safety features... *outperforms all others.*

Investigate the above statements by seeing your nearest Kingham dealer or contacting our factory by simply checking the reply card below.

PLATFORMS



MODEL PLL
LIGHTWEIGHT HEAVY-DUTY



MODEL PL
REGULAR HEAVY-DUTY



MODEL PLH
EXTRA HEAVY-DUTY



MODEL PLOF
SELF-LOADING OIL FIELD FLOAT



MODEL PLF
4-WHEEL PLATFORM

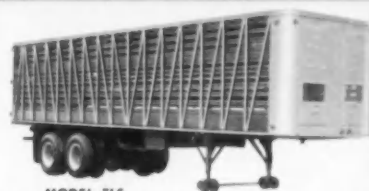


MODEL PLM
LIGHT-DUTY MACHINERY TRAILER

AND STEEL TRAILERS



MODELS TAPO & TSPO
FRAMELESS CARGO OPEN-TOP



MODEL TLS
FRAMELESS LIVESTOCK VAN



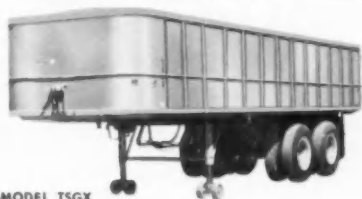
MODEL KAGX
RIBBED PANEL FRUIT & GRAIN



MODEL TBB
FRAMELESS BOTTLE TRAILER



MODELS TAW & TSW
FRAMELESS WAREHOUSE VAN



MODEL TSGX
RIBBED STEEL FRUIT & GRAIN



MODEL KAI
REGULAR-PRODUCE VAN



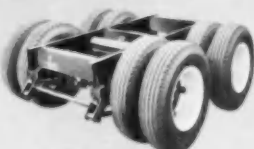
MODELS TAPI & TSPI
REFRIGERATED VAN

TOPS in Appearance... **TOPS** in Long Life...

CHASSIS



MODEL CD
CONVERSION DOLLY



MODEL CB
BOGY



MODEL CHP
POLE TRAILER



MODEL CHF
4-WHEEL CHASSIS



MODEL CHS
STRAIGHT-LEVEL CHASSIS



MODEL CHDS
SIDE DUMP CHASSIS



MODEL CHD
END DUMP CHASSIS



MODEL CH
DROP FRAME CHASSIS

FREE
KINGHAM LITERATURE

☒ CHECK YOUR CHOICE
CUT OUT CARD . . .

and Mail today!

KINGHAM TRAILER COMPANY, INC.

DEPT. CJ48, 1409 W. HILL ST.
LOUISVILLE 10, KENTUCKY

FILE FOLDERS WITH FULL INFORMATION ABOUT:

- | | |
|--|---|
| <input type="checkbox"/> Aluminum Trailers | <input type="checkbox"/> Platforms |
| <input type="checkbox"/> Steel Trailers | <input type="checkbox"/> Truck Body Kit |
| <input type="checkbox"/> Chassis | <input type="checkbox"/> Dump Trailers |

OR SINGLE INFORMATION SHEETS OF MODELS:

- | | | | | |
|------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| <input type="checkbox"/> SA | <input type="checkbox"/> KAGX | <input type="checkbox"/> TBB | <input type="checkbox"/> CH | <input type="checkbox"/> PLM |
| <input type="checkbox"/> SS | <input type="checkbox"/> KAI | <input type="checkbox"/> TLS | <input type="checkbox"/> CHF | <input type="checkbox"/> PL |
| <input type="checkbox"/> KA | <input type="checkbox"/> TAPI | <input type="checkbox"/> SAO | <input type="checkbox"/> CHP | <input type="checkbox"/> PLOF |
| <input type="checkbox"/> KAK | <input type="checkbox"/> TSPI | <input type="checkbox"/> SSO | <input type="checkbox"/> CHD | <input type="checkbox"/> PLF |
| <input type="checkbox"/> KAX | <input type="checkbox"/> TAW | <input type="checkbox"/> TSPO | <input type="checkbox"/> CHDS | <input type="checkbox"/> FED |
| <input type="checkbox"/> TAP | <input type="checkbox"/> TSW | <input type="checkbox"/> TAPO | <input type="checkbox"/> CHS | <input type="checkbox"/> CEDF |
| <input type="checkbox"/> TSP | <input type="checkbox"/> TSG | <input type="checkbox"/> CD | <input type="checkbox"/> PLL | <input type="checkbox"/> CEDU |
| <input type="checkbox"/> KAG | <input type="checkbox"/> TSGX | <input type="checkbox"/> CB | <input type="checkbox"/> PLH | <input type="checkbox"/> TBK |

THE ALL-ALUMINUM LINE:

- | | | | |
|-------------------------------|--------------------------------|--------------------------------|---------------------------------|
| <input type="checkbox"/> KAA | <input type="checkbox"/> KAAK | <input type="checkbox"/> KAAL | <input type="checkbox"/> WKAAX |
| <input type="checkbox"/> KAXX | <input type="checkbox"/> KAAKX | <input type="checkbox"/> KAALX | <input type="checkbox"/> WKAAXX |

GENTLEMEN:

Please send me the free literature checked on this card prepaid by return mail.

Name _____

Company _____

Address _____

City _____ State _____

INTRODUCING...



MODEL KAA
STANDARD ALL-ALUMINUM VAN



MODEL KAAX
STANDARD ALL-ALUMINUM VAN
WITH EXTERIOR POSTS



MODEL KAAKX
STANDARD ALL-ALUMINUM OFFSET
FLOOR WITH EXTERIOR POSTS

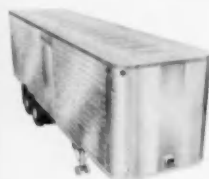


MODEL KAAK
STANDARD ALL-ALUMINUM
OFFSET FLOOR



ALL-ALUMINUM LINE

WIDTHS: From 92" through 94" HEIGHTS: Level Floor up to 99"; Drop Floor up to 102" without wheel boxes
Drop Floor up to 128" with wheel boxes



MODEL KAAL
ALL-LEVEL MAXIMUM HEIGHT
ALUMINUM VAN



MODEL WKAAXX
WIDEST WIDTH MAXIMUM HEIGHT
ALL-ALUMINUM—OFFSET FLOOR
WITH EXTERIOR POSTS



MODEL WKAAX
WIDEST WIDTH ALUMINUM VAN
EXTERIOR POSTS



MODEL KAALX
ALL-LEVEL MAXIMUM HEIGHT
ALUMINUM VAN—EXTERIOR POSTS



Kingham Trailer Company, Inc., is located in Louisville, Kentucky, at 15th and Hill Streets. It is equipped with the most modern operations and master craftsmen to build the finest trailers on the road today. The complete trailer family takes great pride in producing quality-built trailers.

The Kingham group has built trailers for thirty years. The first being a pole trailer for hauling oil field pipes to the most complicated engineered

refrigerated van of today.

Progress and history are being made at the 15th and Hill location. For instance, the Kingham Body & Trailer Kit Division designed a truck body kit that is guaranteed not to leak. A strong point in any transportation hauler. This, plus many other points, makes it the best kit ever built.

Kingham is looking ahead for your future needs and is planning today for a better tomorrow.

DUMP TRAILERS



MODEL CEDF
CONVENTIONAL END DUMP
FRONT TELESCOPE

MODEL CEDU
CONVENTIONAL END DUMP
TELESCOPE UNDER BODY



MODEL FED
FRAMELESS END DUMP

FIRST CLASS
PERMIT NO. 466
Louisville, Ky.

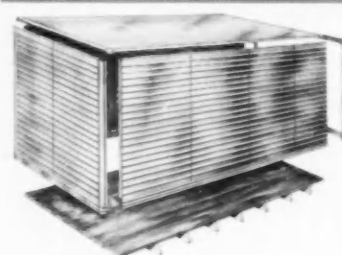
BUSINESS REPLY CARD

No Postage Stamp Necessary If Mailed In The United States

KINGHAM TRAILER COMPANY, INC.

1409 W. HILL STREET
LOUISVILLE 10, KENTUCKY

TRUCK BODY KIT



MODEL TBK

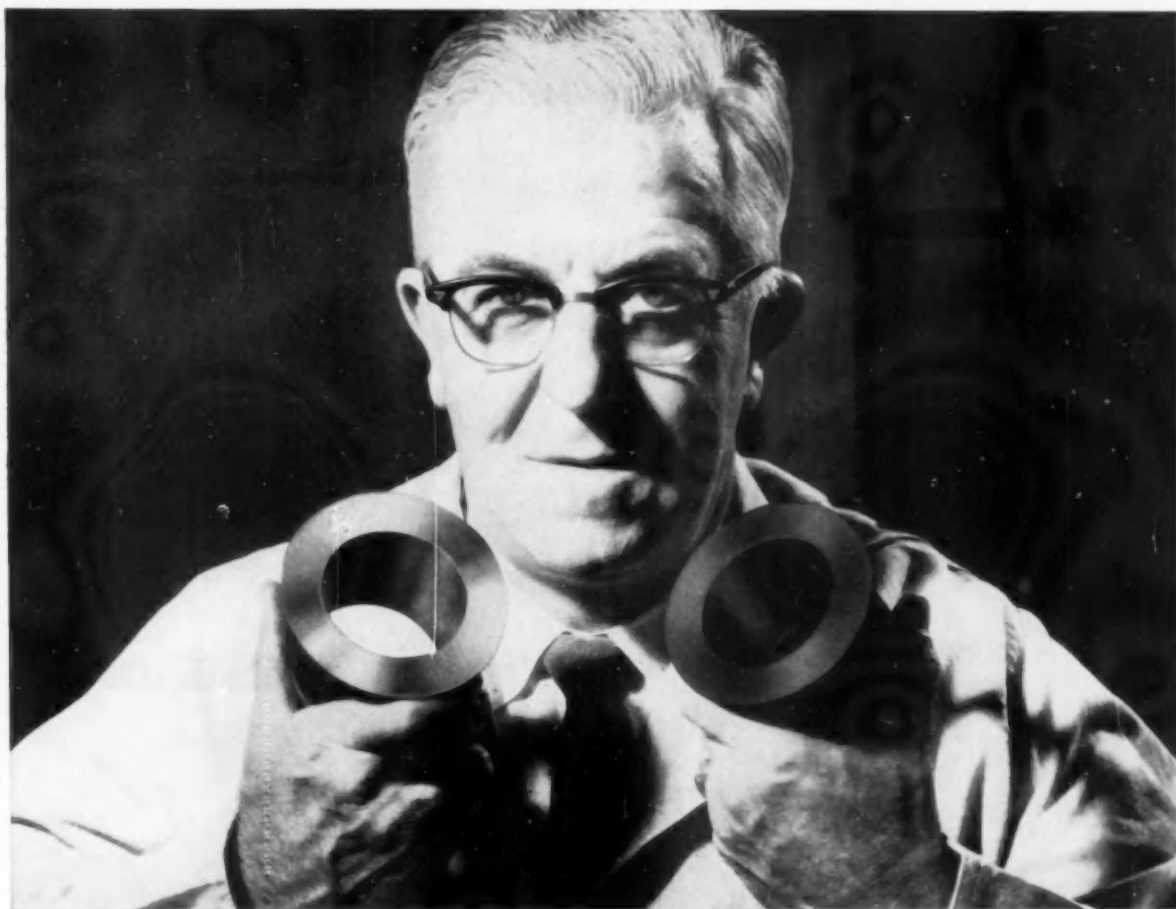
Kingham truck body kits are built for fast assembly . . . guaranteed not to leak. Built and sold through the Kingham Body & Trailer Kit Division.

ASK ABOUT



AIR-RIDE SUSPENSION

ON ALL UNITS



Which Twin is the PHONY?

**One of these clutch sleeves
will cause trouble . . .
within 10,000 miles !**

If you picked the sleeve on the left, you're right! That shiny, "brand-new" look is the tip-off. It means the face has been reground, removing all or most of the case-hardening necessary for long, trouble-free wear.

The sleeve face of the genuine Lipe Guaranteed Clutch at right bears the almost-black finish of newly case-hardened and Luberized steel. Case-hardening to a depth of .007" and a further surface treatment which impregnates the pores of the metal with a lubricating

preservative increases the life of Lipe clutch sleeves 5 to 10 times over that of untreated or reground sleeves.

Field rebuilders' "short cuts" mean short clutch life for you!

A reground sleeve is just one fault you may find in a field-rebuilt clutch. In addition, there may be improper balancing; faded pressure springs that cannot maintain the required torque; reground pressure plates that warp and dish under normal friction heat.

All parts in Lipe Clutches conform to high precision standards !

From our experience in supplying clutches to 54 makers of heavy-duty equipment comes the know-how that

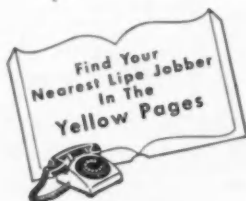
goes into the manufacture of the Lipe Guaranteed Clutch. That is why we can unconditionally guarantee our product to be unequalled by field rebuilders.



Look for this factory seal when you take delivery on a Lipe Guaranteed Clutch for replacement service. It is your assurance of long trouble-free life, and big long-run savings.

**SEND FOR OUR FREE
"Clutch Facts" Booklet**

Tells you how to get more life from your heavy-duty clutches and what to look for when replacing them.



TRUCK DATA

KENWORTH

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)
H-S 590-G	590	6	5 x 5
H-S 590-B	590	6	5 x 5
Cum JT-6-B	401	6	4 $\frac{1}{8}$ x 5
Cum NHB 600	743	6	5 $\frac{1}{8}$ x 6
Cum NHBID 600	743	6	5 $\frac{1}{8}$ x 6
Cum NVH 1200	1148	12	5 $\frac{1}{8}$ x 6

Oil Pressure

Hall-Scott engines...
60 psi @ 2800 rpm
Cum JT-6-B...30-60 psi @ governed speed.
Other Cummins engines...30-50 psi @ governed speed.

IGNITION

Cam Angle (Dwell)

H-S 590-G & B.... 31-37 deg

Breaker Point Gap

H-S 590-G & B.... .022 in.

Spark Occurs

(Degrees Before Top Center)

H-S 590-G 5 deg
H-S 590-B 10 deg

SPARK PLUGS

Make & Type

H-S engines CH J-5

Size

H-S engines 14 mm

Gap

H-S 590-G025 in.
H-S 590-B015 in.

VALVES

Operating Tappet Clearance

H-S engines (cold)...
Inlet: .016 in.
Exhaust: .019 in.
Cummins engines (with oil temperature @ 140 deg).
JT-6-B Inlet: .015 in.
Exhaust: .025 in.
N series Inlet: .014 in.
Exhaust: .027 in.

Seat Angle

H-S engines 45 deg
Cummins engines 30 deg

Face Angle

H-S engines 45 deg
Cummins engines 30 deg

TENSIONS

Cylinder Head Bolt

H-S engines... $\frac{5}{8}$ -18 thread: 140-160 lb-ft; 7/16-20 thread: 30-40 lb-ft
Cum JT-6-B...11/16 thread: 240-250 lb-ft; $\frac{3}{4}$ thread: 380-400 lb-ft
N series 430-450 lb-ft

VALVE SPRINGS

Pressure

(Valve Open)

H-S 590 G & B...
Inner: 80 lb @ 1.750 in.
Outer: 116 lb @ 1.812 in.
Cum JT-6-B...
169-187 lb @ 2.406 in.
Cum N series...
110 lb @ 1.8437 in.

(Valve Closed)

H-S 590 G & B...
Inner: 41 lb @ 2.2500 in.
Outer: 60 lb @ 2.3125 in.
Cum JT-6-B...
81-91 lb @ 2.406 in.
Cum N series...
78 lb @ 2.250 in.

BATTERY

Amp-Hour Capacity

All models 150

Plates Per Cell

All models 23

Terminal Grounded

All models Neg

SAE Group No.

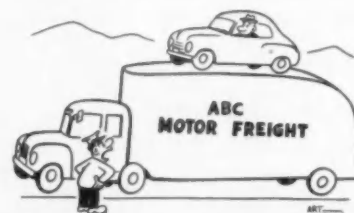
All models 4

FRONT END

Toe-In

Timken axles ... $\frac{1}{8}$ in.
Wisc F-3200 3/16-5/16 in.
Wisc F-7900 $\frac{1}{8}$ - $\frac{1}{4}$ in.
Kenworth 1-F-1... $\frac{1}{4}$ in.
Page & Page
60-FN 1/16- $\frac{1}{8}$ in.
Shuler FE-15.... $\frac{1}{8}$ in.
Shuler FE-18.... $\frac{1}{8}$ in.

(TURN TO PAGE 126, PLEASE)



"Just how far have you been piggy-back riding?"

Aeroquip Announces 2 Types of Truck Air Brake Hose with NEW SEGMENTED FITTINGS

Make Dependable Hose Assemblies Quickly! Only Pliers Are Needed!



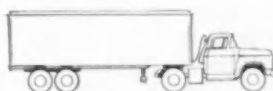
Unique new Segmented Fitting assembles in seconds, fits any S.A.E. Type A or Type B hose, can be used again and again.



Male pipe and swivel nut hose fittings are available, with or without spring guard, to fit every application.



No machines, wrenches or special assembly tools are needed to make Aeroquip Air Brake Hose Lines. Just push the nipple into the hose and assemble the segmented socket with a pair of pliers.



Now, thanks to the revolutionary new Aeroquip Segmented Hose Fitting, you can really simplify air brake maintenance. Designed for use with Aeroquip Air Brake Hose (or any other S.A.E.-approved air brake hose), Segmented Fittings permit assembly of dependable air brake lines anywhere, by drivers or mechanics. Equipment downtime is reduced, long service is assured, and replacement costs are lowered substantially.

Two hose types are available: Aeroquip 2550 (S.A.E. Type A) Hose and 2570 (S.A.E. Type B) Hose. Both types meet specifications of S.A.E. 40R2 and both hose types and Segmented Fittings have been tested and approved by an independent testing laboratory and certified by the State of Pennsylvania.

Full information on new Aeroquip Air Brake Hose and Segmented Fittings are available. Mail the coupon below for engineering bulletin IEB-33A.

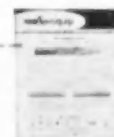


AEROQUIP CORPORATION, JACKSON, MICHIGAN
INDUSTRIAL DIVISION, VAN WERT, OHIO • WESTERN DIVISION, BURBANK, CALIFORNIA
AEROQUIP (CANADA) LTD., TORONTO 19, ONTARIO
AEROQUIP PRODUCTS ARE FULLY PROTECTED BY PATENTS IN U.S.A. AND ABROAD

Aeroquip Corporation, Jackson, Michigan

Please send me a copy of Bulletin IEB-33A on Truck Air Brake Hose and Segmented Fittings.

Name _____
Title _____
Company _____
Address _____
City _____ Zone _____ State _____



CCJ-4

TRUCK DATA

KENWORTH

Continued from Page 124

Camber

Tim FU-900	0 deg
Other Tim axles..	1 deg
Wisc F-7900	1 deg
Other Wisc. axles.	0 deg
Kenworth 1-F-1 ..	1 deg
Page & Page 60-FN	0 deg
Shuler axles	1 deg

Caster

Tim FD-900	6	-6½ deg
Tim FE-900	3	-4 deg
Other Tim axles..	1½	deg
Wisc F-223	5	deg
Wisc F-3200	6½	deg
Wisc F-7900	1½	deg
Kenworth 1-F-1 ..	0	deg
Page & Page 60-FN	1½-2½	deg
Shuler axles	2	-2½ deg

King Pin Slant

Tim FD & FE-900	5½ deg
Tim FU-900	0 deg
Other Tim axles..	8 deg
Wisc F-7900	8 deg
All others	0 deg

CAPACITIES

Crankcase

H-S 590 G & B.....	14 qt
Cum JT-6-B, HB	16 qt
Cum NRT-6B	26 qt
Cum NHB-600	28 qt
Cum NHHB	32 qt
Cum VT & NHVBI-1200.	60 qt

Transmission

Transmission Model No.

8041, 8045, 8241, 8245...	16 pt
8051, 8055, 8251, 8255...	24 pt
4-A-86, 4-B-86, 4-A-860..	17 pt
5-A-62, 5-A-620, 5-C	
series	24 pt
10-B-1120, 10-F-1220...	

Front: 32 pt

Rear: 12 pt

All auxiliaries

Torqmatic & Torque Converters:

TC-600	40 pt
TG-600	48 pt
Hydraulic lines	16 pt

Twin Disc:

10,000 series	60 pt
11,500 series	76 pt
16,000 series	160 pt

Rear Axle

H-100	20 pt
L-110, SW-3013	23 pt
Q-100, SFD-3020, SFDD-3020 (b)	31 pt
R-100	30 pt
R-200 (a), R-230 (a)...	36 pt
R-300 (a)	34 pt
R-330 (a), TSD-7, TSDD-7 (b)	35 pt
S-200 (a), U-200 (a)...	38 pt
S-300 (a), U-300 (a)...	39 pt
SLD, SFD-4600, SD-472..	28 pt
SLDD (b), SFDD-4600..	28 pt
SW-456, GSW-458	28 pt
SQD, SQDD	22 pt
SFD-460	29 pt
SD-462	32 pt
SFD-157	9 pt
SQW, GSW-QFR2	40 pt
KSW-QFRI	40 pt
SW-3456, GSW-8FR2 ...	24 pt
KSW-8 FRI	24 pt
SW-3012	17 pt
(a)—Add 1 pt to pinion bearing cage. (b)—Add 2 pt to inter-axle differential.	



"The boss wasn't fooling when he said he'd go to any extreme to get a good secretary!"

Cooling System

(Capacity is for engine with cab model indicated)

H-S 590 (Conv & COE) ..	53 qt
(CBE)	55 qt
(CSE)	42 qt
Cum JT-6-B	43 qt
Cum HB	51 qt
Cum HRB	58 qt
Cum HRBB (Convent'l) ..	42 qt
(CSE)	43 qt
(843 cab) ..	46 qt
Cum NHB NTB	53 qt
Cum NHBS, NRT	64 qt
Cum HRBS, NTO	52 qt
Cum NHRBS, NHHT ...	58 qt
Cum NHHB (801 cab) ...	60 qt
(other cabs) ..	63 qt
Cum NVHB-12 (2 cores)	156 qt
Cum NRT-6 (2 cores)...	92 qt
Cum NHHB, NHHT (844)	54 qt
(with 843 cab) ..	52 qt

LUBRICATION

Crankcase

Hall-Scott engines...Above 90 deg use SAE 40; Between 32 and 90 deg use SAE 30; Below 32 deg use SAE 20.

Cummins engines...Above 90 deg use SAE 30; Between 32 and 90 deg use SAE 20; Below 32 deg use SAE 10W.

Use Heavy Duty engine oil.

Transmission

Spicer...Use SAE 50 straight mineral motor oil all year.

Fuller...Use SAE 140 straight mineral gear lubricant in Summer, SAE 90 in Winter.

Hydraulic...Use Type C hydraulic transmission fluid all year.

Rear Axle

Worm Drive....Use SAE 140 straight mineral gear lube all year.

Hypoid, Spiral-Bevel and Planetary...Use SAE 140 SCL Hypoid gear lube all year.

MODEL NUMBERS

Truck Model...Plate in cab.

Transmission Model....Plate on transmission.

Rear Axle Model...Plate on axle housing bowl.



"Bringin' out 22 tons of redwood, they need 'em fast . . . buddy, these brakes are in for it!"

Good thing this rig stops on American Brakeblok. She'll pull in at the mill on time—and safely!

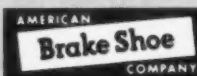
Even through flash floods, rugged American Brakeblok thick blocks shake off water quicker than a pup . . . because they *maintain an unyielding, peak friction value*—right down to the bolt tops!

No friction "wear-off", these blocks are solid and non-compressible—not woven, laminated or impregnated.

For carriers, buses or highly specialized rigs . . . a recent survey shows *17% more* operators use American Brakeblok than the next leading make.



Specify
American Brakeblok.
heavy-duty lining
and thick blocks



AMERICAN BRAKEBLOK DIVISION • Executive Offices: P. O. Box 21, Birmingham, Mich.
Plants in Winchester, Va. • Cleveland, Ohio • Hillburn, N. Y. • Lindsay, Ont. • Mexico City, Mexico • Gif, France



TRUCK DATA[✓]

PETERBILT

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)
Cummins NHB	743	6	5 $\frac{1}{8}$ x 6
Cummins NT6B	743	6	5 $\frac{1}{8}$ x 6
Cummins NHBS	743	6	5 $\frac{1}{8}$ x 6
Cummins NHRBS	743	6	5 $\frac{1}{8}$ x 6
Hall-Scott 1091	1090	6	5 $\frac{3}{4}$ x 7
Buda 6DAS-844	844	6	5 $\frac{1}{4}$ x 6 $\frac{1}{2}$

Oil Pressure

Cummins engines...30-50 psi @ governed speed
 H-S 1091 (butane & gas)...10 psi @ 350 rpm
 Buda 6DAS-844...40 psi @ 1400 rpm

IGNITION

Cam Angle (Dwell)

H-S 1091 34-37 deg

Breaker Point Gap

H-S 1091021 in.

Spark Occurs

(Degrees Before Top Center)

H-S 1091.....Gasoline: 2 deg
 Butane: 8 deg

SPARK PLUGS

Make & Type

H-S 1091...Gasoline—Intake side, CH 10 Com; Exhaust side, CH 6 Com; Butane—Intake side, CH 6 Com; Exhaust side, CH 4 Com.

Size

H-S 1091 18 mm

Gap

H-S 1091018-.023 in.

VALVES

Operating Tappet Clearance (Hot unless noted)

CumminsInlet: .014 in.
 Exhaust: .027 in.
 H-S 1091 (Cold)...Inlet: .021 in.
 Exhaust: .031 in.
 Buda 6DAS-844...Inlet and Exhaust: .015 in.

Seat Angle

Cummins engines 30 deg
 H-S 1091Inlet: 30 deg
 Exhaust: 45 deg

Face Angle

Cummins engines 30 deg
 H-S 1091Inlet: 30 deg
 Exhaust: 44 $\frac{1}{2}$ -44 $\frac{3}{4}$ deg

VALVE SPRINGS

Pressure

(Valve Open)

Cummins engines...
 110 lb @ 1 27/32 in.
 H-S 1091.....Inner: 105 lb @
 1 15/16 in; Outer: 138 lb @
 2 in.
 Buda 6 DAS.....200-210 lb @
 2 13/64 in.

BATTERY

Amp-Hour Capacity

All models (2 batteries)... 152

Plates Per Cell

All models 19

SAE Group No.

All models 4D

Terminal Grounded

All models Pos

FRONT END

Toe-In

All models 0- $\frac{1}{8}$ in.

Camber

All models 1 deg

Caster

Truck Model

280-350 series 3 deg
 360, 360 COE 2 deg
 370, 381, 390 1 $\frac{1}{2}$ deg

King Pin Slant

Truck Model

370, 381, 390 8 deg
 All others 5 $\frac{1}{2}$ deg

CAPACITIES

Crankcase

All models 20 qt
 (TURN TO PAGE 130, PLEASE)



"Hello, Shop? Check the governor on Kolby's rig!"

see Highway "Hi-T" before you buy
 before you buy, see Highway "Hi-T"
 "Hi-T" by Highway-see it before you buy
 see Highway "Hi-T" before you buy
 before you buy, see Highway "Hi-T"
 "Hi-T" by Highway-see it before you buy
 see Highway "Hi-T" before you buy
 before you buy, see Highway "Hi-T"
 "Hi-T" by Highway-see it before you buy



"Hi-T" is here!

Now Highway Trailer gives you a tremendous bonus in payload, cube capacity, operating profits, and low maintenance at no increase in price!

Before you buy trailers in 1958, listen to the high profits story on the new Highway "Hi-T"!

Your Highway Trailer distributor has the story now!
 Call, write or wire

HIGHWAY TRAILER COMPANY

Headquarters: Edgerton, Wisconsin

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see Highway
 before you buy
 "Hi-T" by Highway
 see Highway
 before you buy

you buy
 buy
 T
 buy
 buy
 Hi-T

"Hi-T" by Highway-see it before you buy

TRUCK DATA

PETERBILT

Continued from Page 128

Transmission

All models 18 qt

Rear Axle

Truck Model

280, 281 series	26 pt
350, 351 series (each)...	14 pt
All others (each)	20 pt

Cooling System

All models 60 qt

LUBRICATION

Crankcase

All models...Above 90 deg use SAE 30; Between 60 and 90 deg use SAE 20; Between 10 and 60 deg use SAE 10

Transmission

All models...Use SAE 140 in Summer, SAE 90 in Winter.

Rear Axle

All models...Use SAE 140 in Summer, SAE 90 in Winter.

VOLKSWAGEN

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)
Volkswagen 1192	72.74	4	3.03 x 2.52

Oil Pressure

1192 37 psi @ 2500 rpm

Compression Pressure

1192... 7 psi @ cranking speed

IGNITION

Cam Angle

1192 52-56 deg

Breaker Point Gap

1192016 in.

Spark Occurs

(Degrees Before Top Center)

1192 7½ deg

SPARK PLUGS

Make & Type

1192...AC 43L, AL AE6 or CH L10S

Size

1192 14 mm

Gap

1192024-.028 in.

Torque

1192 22-29 lb-ft

VALVES

Operating Tappet Clearance

1192 (Cold)Inlet: .004 in.
Exhaust: .004 in.

Seat Angle

1192Inlet: 45 deg
Exhaust: 45 deg

TENSIONS

Cylinder Head Bolt

1192 14 & 22 lb-ft

VALVE SPRINGS

Free Length

1192 1.1 in.

BATTERY

Amp-Hour Capacity

1192 77

Plates Per Cell

1192 13

Terminal Grounded

1192 Neg

FRONT END

Toe-In

77 MMLoaded: .04 in.
Unloaded: .08-.2 in.

Camber

77 MM 1/6-1 1/6 deg

Caster

77 MM 0 deg

CAPACITIES

Crankcase

1192 5.3 pt

Transmission—Rear Axle

77 MM 5.3 pt
Refill: 4.2 pt

LUBRICATION

Crankcase

1192...Above 86 deg use SAE 30; Between 32 and 86 deg use SAE 20 or 20W; Below 32 deg use SAE 10W; Below -13 deg use SAE 5W

Transmission—Rear Axle

1192...Above 32 deg use SAE 90; Below 32 deg use SAE 80.

If it's worth a good serviceman's time . . .



. . . it's worth good automotive wire



Belden PRIMARY WIRE

There is a long-life Belden Wire for every car, truck, bus or tractor requirement. Belden Kits and combinations make installation easy.



Belden

WIREMAKER FOR INDUSTRY
SINCE 1902
CHICAGO

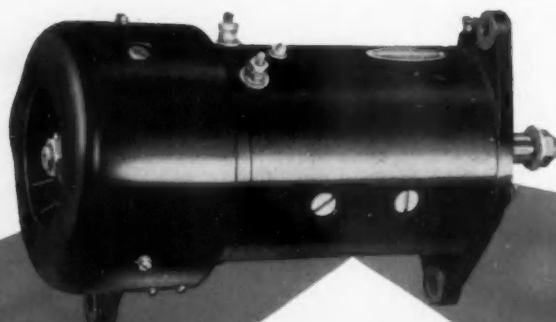
6-7

Battery Cables

Spark Plug Wires

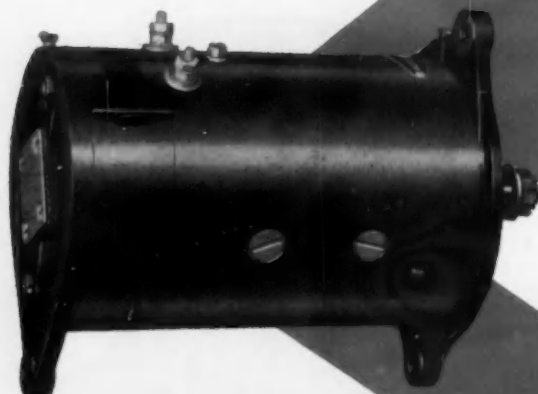
Lighting Wires

ONLY DELCO-REMY COVERS



NEW TOTALLY ENCLOSED GENERATORS FOR OFF-THE-ROAD APPLICATIONS

Forced-air cooled for 50% more output with no increase in size! Splash-proof. Dust-proof. 6-, 12-, 24-volt d.c. models.



FULL LINE OF EXTRA-OUTPUT D.C. GENERATORS
FOR MEDIUM- TO HEAVY-DUTY APPLICATIONS

NEW PIGGY-BACK GENERATORS

Extra power with economy! Tailored extra output in single voltage systems. You can use both 6- and 12-volt d.c. units on the same vehicle.

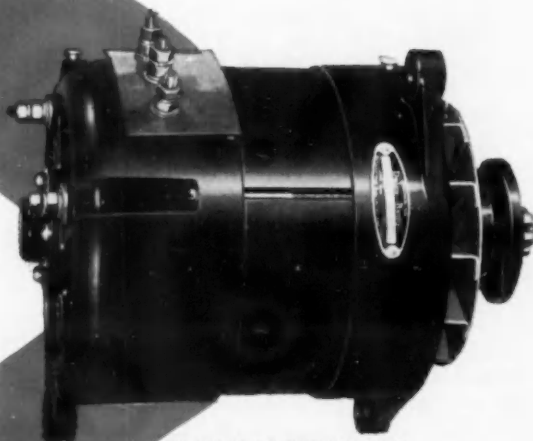


CHECK THESE EXTRA-DUTY D.C. FEATURES

- Substantial output at engine idle where required
- Greater brush area—better commutation, longer brush life
- Ball bearings at both drive and commutator ends
- Sealed field coils—impervious to moisture and corrosion
- Double insulated armature coils—nylon and cotton
- Hot-impregnated armature for extra insulation
- Dynamically balanced armature
- Wider, heavier brushes—service up to 100,000 miles is common

ALL THE BASES!

*The only complete
line of both d.c. and
a.c. generators—
right for your job!*



FULL LINE OF A.C. GENERATORS FOR
EXTRA-HEAVY ELECTRICAL LOADS

CHECK THESE SUPERIOR A.C. FEATURES

- Greater output at engine idle
- Dependable performance at all operating speeds
- *Exclusive self-regulating current control—no current regulator or limiter needed*
- *Exclusive stainless steel slip rings*
- Extra-large ball bearings at both drive and commutator ends
- Shaft-keyed rotors prevent high torque slippage
- Easy all-around maintenance—positive oiler lubrication

Name your generator need. Better charge at engine idle? More power for the ever-increasing demands of more and more electrical accessories? Lower replacement cost for lighter duty operation?

You name it. Delco-Remy meets it. Delco-Remy, in fact, has the *only* complete line of both d.c. and a.c. generators with matching waterproof regulators to meet every fleet requirement. Whether you haul light loads or heavy loads—off the road, around town, or across the nation—at highway speeds or in creeping traffic—Delco-Remy has the *right* generator to fit your need.

The complete Delco-Remy line brings you this important benefit: When you buy these extra-duty generators through the United Motors System, or from your vehicle dealer, you get the tailored performance you need—at minimum cost.

Specify Delco-Remy extra-duty generators on your new equipment, and for replacement on your present equipment. Only the complete Delco-Remy d.c. and a.c. line covers all the bases to fit every generator need.

GENERAL MOTORS LEADS THE WAY—STARTING WITH

Delco-Remy

ELECTRICAL SYSTEMS

DELCO-REMY • DIVISION OF GENERAL MOTORS • ANDERSON, INDIANA

TRUCK DATA

REO

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)
OA-255, OA-255 LPG	255	6	3 $\frac{5}{8}$ x 4 $\frac{1}{8}$
OA-292	292	6	3 $\frac{7}{8}$ x 4 $\frac{1}{8}$
OA-331, OA-331 LPG	331	6	4 $\frac{1}{8}$ x 4 $\frac{1}{8}$
OH-160 LPG, OH-170	331	6	4 $\frac{1}{8}$ x 4 $\frac{1}{8}$
OV-207	390	8	3 $\frac{7}{8}$ x 4 $\frac{1}{8}$
OV-220 LPG, OV-235	440	8	4 $\frac{1}{8}$ x 4 $\frac{1}{8}$

Oil Pressure

All 6-cyl engines...35 psi @ 2000 rpm Minimum, 40-60 psi @ top speed Maximum.

All 8-cyl engines...35-40 psi @ 2000 rpm Minimum, 45-60 psi @ top speed Maximum.

Compression Pressure

(At 150 rpm)

Engine

OA-225, OA-255 LPG...	115-135 psi
OA-292, OA-331...	110-130 psi
OH-160 LPG	110-130 psi
OA-331 LPG, OV-235...	130-150 psi
OH-170, OV-207...	130-150 psi
OV-220 LPG	160-180 psi

IGNITION

Cam Angle (Dwell)

OA- gasoline engines...	31-37 deg
OA- LPG engines...	38-45 deg
OH-160 LPG	31-37 deg
OH-170	38-45 deg
OV- series	26-33 deg

Breaker Point Gap

OA- gasoline engines..	.022 in.
OH-160 LPG .....	.022 in.
All others .....	.016 in.

Spark Occurs

Degrees Before Top Center at given idle speed

Engine

OA-255	8 deg @ 450 rpm
OA-292	4 deg @ 450 rpm
OA-331	2 deg @ 450 rpm
OA-LPG's ..	6 deg @ 450 rpm
OH-160 LPG	8 deg @ 500 rpm
OH-170	2 deg @ 500 rpm
OV- series..	TC @ 500 rpm

SPARK PLUGS

Make & Type

Engine

OA-255, OA-255 LPG...	CH J-7, AL A-5 or AC 44
OV-series...	CH H-9, AL AL-5 or AC 43L
All others...	CH J-6, AL A-3 or AC 43

Size

All engines	14 mm
-------------------	-------

Gap

Engine

OA LPG's .....	.020 in.
OH-160 LPG .....	.020 in.
All others .....	.025 in.

Torque

All engines	25-30 lb-ft
-------------------	-------------

VALVES

Operating Tappet Clearance

(Hot unless noted)

OA- engines....	Intake: .015 in.
	Exhaust: .015 in.
All others.....	Intake: .020 in.
	Exhaust: .020 in.

Seat Angle

All engines	30 deg
-------------------	--------

Face Angle

All engines	29 $\frac{1}{2}$ deg
-------------------	----------------------

TENSIONS

Manifold Bolt

All engines	35-40 lb-ft
-------------------	-------------

Cylinder Head Bolt

All engines.....	100-105 lb-ft
------------------	---------------

VALVE SPRINGS

Free Length

LPG engines....	Inlet: 1.816 in.
	Exhaust: 2.1406 in.
All others	Inlet: 2.1406 in.
	Exhaust: 2.1406 in.

Pressure

LPG engines...	Inlet: 178-188 lb compressed to 1.163 in., valve open; 64-70 lb compressed to 1.583 in., valve closed. Exhaust: 174-192 lb compressed to 1.360 in., valve open; 63 $\frac{1}{2}$ -70 $\frac{1}{2}$ lb compressed to 1.780 in., valve closed.
All others...	Inlet and Exhaust: 178-188 lb compressed to 1.360 in., valve open; 64-70 lb compressed to 1.780 in., valve closed.

BATTERY

Amp-Hour Capacity

Model

N. Y. school bus, F-120,	
F-122	110
All others	70

Plates Per Cell

N. Y. school bus, F-120,	
F-122	11
All others	13
(TURN TO PAGE 136, PLEASE)	

*This powerful Dow spread in
The Saturday Evening Post and Sports Illustrated
points out why*

EVERY COOLING SYSTEM IN YOUR FLEET SHOULD BE DRAINED!

Automotive Experts, the men who
manufacture and service automobiles,
trucks and tractors, agree—

Springtime is the time to DRAIN YOUR RADIATOR

Your cooling system in first class condition can mean better gasoline mileage, more pickup and power, fewer knocks and pings, and most important—worry-free summer driving.

FACT 1: Laboratory tests prove cooling systems should be drained

The Dow Chemical Company Laboratory has proven that when radiators are first used after the winter, the water in the system often contains more than 10% of impurities which will cause the radiator to become clogged with scale and rust. This scale and rust will clog the radiator and prevent it from doing its job. The radiator will then become clogged with scale and rust and will not be able to cool the engine. This will cause the engine to overheat and will shorten its life. The radiator should be drained and flushed out before the summer driving season begins.

FACT 2: Your cooling system directly affects all engine parts

The engine depends on the radiator for its cooling. If the radiator is clogged with scale and rust, the engine will overheat and will not be able to do its job. This will cause the engine to overheat and will shorten its life. The radiator should be drained and flushed out before the summer driving season begins.

FACT 3: "Pressure" antifreeze should only be used for one winter

Pressure antifreeze is a mixture of water and antifreeze. It is not as good as pure antifreeze. It will break down and will not be able to protect the engine. It should be drained and flushed out before the summer driving season begins.

FACT 4: Regular cooling system service will mean better all-around engine performance

Regular cooling system service will mean better all-around engine performance. It will keep the engine cool and will prevent it from overheating. It will also keep the radiator clean and will prevent it from becoming clogged with scale and rust. This will mean better gasoline mileage, more pickup and power, fewer knocks and pings, and most important—worry-free summer driving.

THE DOW CHEMICAL COMPANY, MIDLAND, MICHIGAN

There's no longer any question about it. Automotive experts *do* recommend that cooling systems be drained at *least* every spring. More and more fleet operators are realizing how vitally important the cooling system is to peak engine performance.

As you know, horsepower is increasing each year. At the same time, cooling system capacity remains constant or decreases. This poses a

problem. In spite of recent pressure system increases, the cooling system has to do a harder job. So the best thing you can do is give every cooling system in your fleet the best chance it can have to do its job right . . . keep it clean and in top operating condition.

You'll be surprised at the good gasoline mileage, quick starts, fewer maintenance worries you get.

THE DOW CHEMICAL COMPANY, MIDLAND, MICHIGAN

DOW

TRUCK DATA

REO

Continued from Page 134

Terminal Grounded

All models Pos

FRONT END

Toe-In

Axle Model No.

All are Timken

27461, 27462 1/16- 1/8 in.

F-223-D/R 3/16-5/16 in.

F-2090-D/R 1/16-3/16 in.

All others 0- 1/8 in.

Camber

F-233-D/R, F-2090-D/R... 0 deg

All others 1 deg

Caster

27461, 27462 3 deg

30000, 31104, 32500 ... 2 deg

FD-900, FD-901, FE-

900 (on Reo F & C

series) 1 1/2 deg

FD-900, FD-901, FE-

900 (on Reo A se-

ries) 3 1/4 deg

F-223-D/R, F-2090-D/R 5-7 deg

King Pin Slant

27461, 27462 8 deg

30000, 31104, 32500... 8 deg

F-233-D/R, F-2090-D/R 0 deg

All others 5 1/2 deg

CAPACITIES

Crankcase

Engine

OV-series... Without filter: 8 qt

With filter: 10 qt

All others... Without filter: 8 qt

With filter: 9 qt

Transmission

Warner T98A 8 pt

Clark 205V 11 pt

Clark 290V 18 pt

Spicer 3152 8 1/2 pt

Spicer 6352, 6453A ... 17 pt

Fuller R35 16 pt

Fuller R46 17 pt

Fuller R96, R960..... 33 pt

Fuller 5A65, 5A650... 12 pt

Auxiliary

Spicer 6231, 6041 8 pt

Spicer 7231, 8031 12 pt

Spicer 8035, 8341 12 pt

Transfer Case

Timken T-77 5 pt

Rear Axle

Axle Model No.

Timken

E-100, F-140 15 pt

E-300, F-340 13 pt

H-100, H-140 20 pt

H-200, H-240 28 pt

H-300, H-340 26 pt

L-100, L-140 23 pt

L-200, LT-200, L-240... 31 pt

L-300, LT-300, L-340... 29 pt

Q-100, QT-200, QT-140.. 31 pt

Q-200, QT-240 34 pt

Q-300 32 pt

QT-300, QT-340 29 pt

R-100, RT-140 30 pt

R-200, RT-240 36 pt

R-300, RT-340 34 pt

SQTT-235 (Rear only)... 45 pt

SQTT-335 (Rear only)... 44 pt

U-200 38 pt

U-300 39 pt

F233, F2090 12 pt

Eaton

13600 13 pt

17500, 18803 22 pt

Tandems

SDHD Front: 16 pt

Rear: 15 pt

SFHD Front: 17 pt

Rear: 16 pt

SLHD Front: 25 pt

Rear: 23 pt

(Following are for each axle)

SFD- SFDD-4600 28 pt

SLD, SLDD 28 pt

SQD, SQDD 22 pt

SQW 33 pt

SQW (with 6 1/2 in. housing

cover) 40 pt

22M.....Front & Rear: 12 pt

28M.....Front & Rear: 17 pt

32M Front: 28 pt

Rear: 33 pt

36M.....Front & Rear: 24 pt

PDU: 3 pt

42M...Rear hole, front &

rear: 20 pt

Front hole, front & rear: 2 pt

PDU: 6 pt

Cooling System

Engine

OA-255, OA-255 LPG... 20 qt

Other OA-series 24 qt

OH-series 26 qt

OV-series 37 1/2 qt

LUBRICATION

Crankcase

All engines...Use Type C Heavy

Duty engine oil. Above 32

deg. use SAE 30, between 20

and 32 deg use SAE 20W, be-

tween -10 and 20 deg use

SAE 10W, below -10 deg use

SAE 5W.

Rear Axle

Timken axles....All models use

SAE 140 multipurpose gear

lubricant Summer and Win-

ter. Use SAE 90 if lower vis-

cosity is needed.

Eaton axles...All models use SAE

90 Extreme Pressure (MIL-L-

2105) lubricant, Summer and

Winter. Below -10 deg use

SAE 80 hypoid gear lubricant

with same additives that are

used in SAE 90 E.P.

Electric shift units...Use SAE 10

engine oil Summer and Win-

ter. Below 0 deg add 1 part

Kerosene to 3 parts SAE 10.

Transmission

Warner and Clark models...Use

SAE 90 straight mineral oil

Summer and Winter.

Spicer...Use only SAE 50 straight

mineral engine oil Summer

and Winter. Do not use HD

engine oil, E.P. gear oils or

all-purpose lubricants.

Fuller...Use only SAE 90 straight

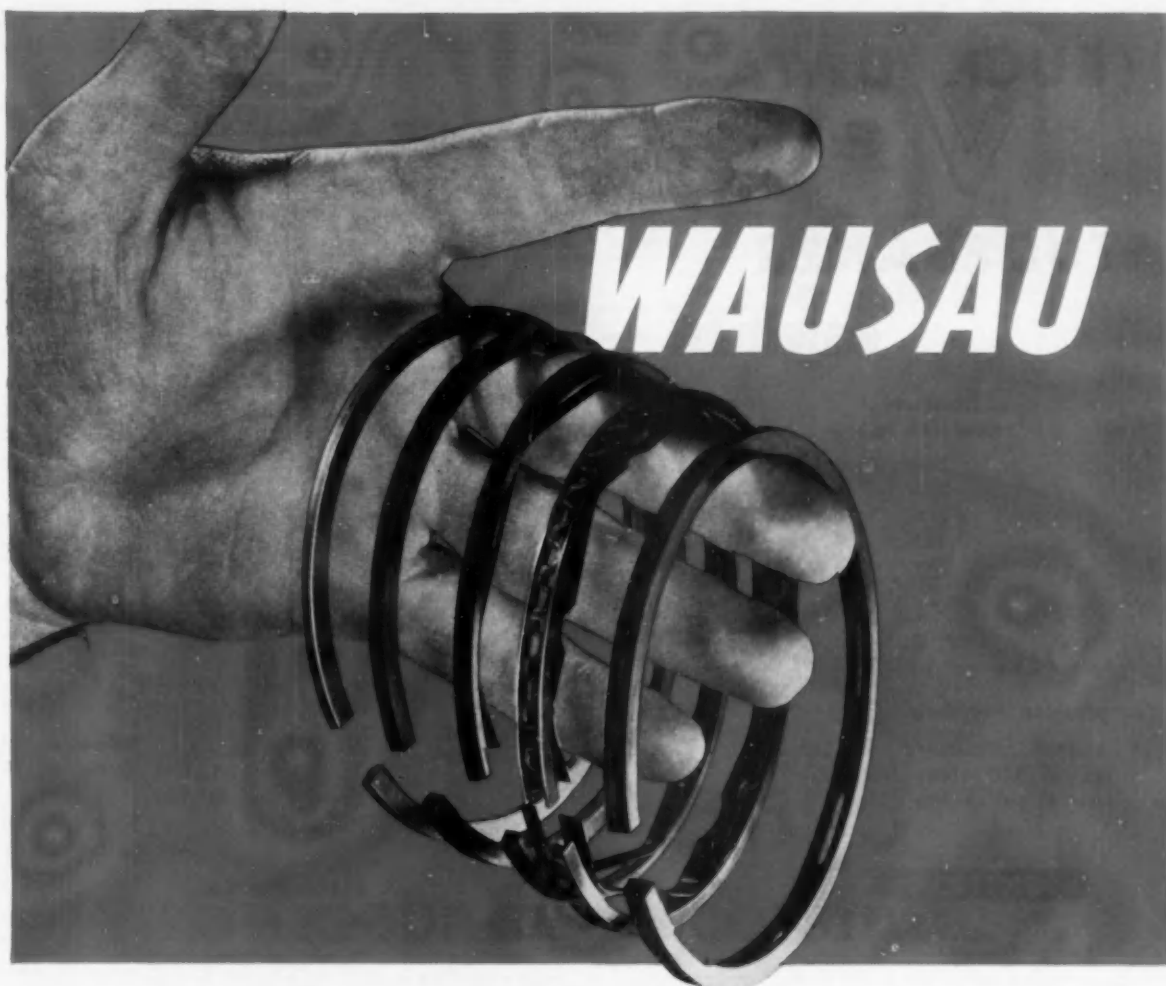
mineral oil Summer and Win-

ter. Below 0 deg use SAE 80.

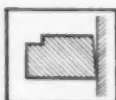
Do not use engine oils, E.P.

gear oils or all-purpose lubri-

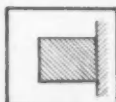
cants.



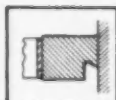
How to select a set of rings for heavy-duty engines



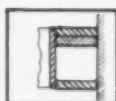
Top Ring — Should be specially alloyed for high impact resistance and fatigue and wear resistance. Example: WAUSAU HT-100 TORSIONAL COMPRESSION (Available in all standard compression ring types).



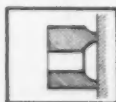
Second Ring — Should be designed for quick seating but with proper tension to insure proper blowby control and drag-free operation. Example: WAUSAU TAPER FACE COMPRESSION.



Scraper Ring — Scraper ring must be specially designed for proper balance between blowby and oil control functions (may be used with inner spring if desired). Example: WAUSAU XX SCRAPER.



Oil Ring — Should be scuff-proof and seat quickly. Multiple piece design should include center section designed to dissipate heat and prevent clogging. Example: WAUSAU OILSAVR, the free-running ring with the safety center unit.



Bottom Ring — Should be auxiliary oil control ring properly ported for adequate drainage with adequate unit pressure for maximum oil control. Example: WAUSAU SUPERPORTOIL (M).

A heavy duty ring set should be designed so that all rings in it operate in harmony with each other, to do the complete job of giving long life and the full-rated horsepower of your engines. WAUSAU HCM Heavy Duty ring set does just that. It has proved its worth over many years in America's greatest automotive vehicles. See your jobber, or write

WAUSAU 
MOTOR PARTS
COMPANY

2400 Eau Claire St., Schofield, Wis.

TRUCK DATA

STUDEBAKER

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)
1E	186	6	3 x 4 $\frac{3}{8}$
3E	259	V-8	3 9/16 x 3 $\frac{1}{4}$
4E	246	6	3 5/16 x 4 $\frac{3}{4}$
5E	259	V-8	3 9/16 x 3 $\frac{1}{4}$
6E	289	V-8	3 9/16 x 3 $\frac{5}{8}$

Oil Pressure

All engines...40 psi @ 1400-1600 rpm with oil @ 150 deg

Compression Pressure

All engines...Standard: 130-150 psi @ 150 rpm; Optional: 120-140 psi @ 150 rpm.

Size

All engines 14 mm

Gap

All 6-cyl engines. .028-.033 in.
All 8-cyl engines. .033-.038 in.

Torque

All engines 25-30 lb-ft

IGNITION

Cam Angle (Dwell)

Engine

1E	38-40 deg
4E	31-37 deg
3E, 5E, 6E	28-34 deg

Breaker Point Gap

Engine

1E	.018-.022 in.
4E	.022 in.
3E, 5E, 6E...	

Original: .013-.018 in.
After wear-in: .010-.015 in.

Spark Occurs

(Degrees Before Top Center)

All 6-cyl engines.....	2 deg
All 8-cyl engines.....	4 deg

SPARK PLUGS

Make & Type

All 6-cyl engines....	CH J-7
All 8-cyl engines....	CH H-10

VALVES

Operating Tappet Clearance

All 6-cyl engines...
Inlet & Exhaust: .016 in. Cold
All 8-cyl engines...
Inlet & Exhaust:
.023-.025 in. Hot

Seat Angle

All engines 45 deg

Face Angle

All engines 45 deg

TENSIONS

Manifold Bolt

All engines...
Inlet: 25-30 lb-ft
Exhaust: 26-30 lb-ft

Cylinder Head Bolt

Engine	
1E	45-50 lb-ft

4E	80-85 lb-ft
3E, 5E, 6E.....	55-65 lb-ft

VALVE SPRINGS

Pressure

(Valve Open)

Engine

1E 93-103 lb @ 1 5/16 in.
4E... Std: 125-135 lb @ 1 $\frac{1}{4}$ in.
H. D. Exh: 125-135 lb @ 1 $\frac{1}{2}$ in.
3E, 5E...
Inlet: 105-115 lb @ 1 43/64 in.
Exhaust—Std: 105-115 lb @ 1 43/64 in.; H. D.: 106-116 lb @ 1 11/32 in.

6E...
Inlet: 105-115 lb @ 1 43/64 in.
Exhaust: 106-116 lb @ 1 11/32 in.

BATTERY

Amp-Hour Capacity

Truck Model

3E series Standard: 50
Optional: 60

Four wheel drives...

Standard: 50
Optional: 60 or 65

Plates Per Cell

All models 9

Terminal Grounded

All models Neg

FRONT END

Toe-In

All models 1 $\frac{1}{16}$ -1 $\frac{1}{8}$ in.

Camber

Four wheel drives.... 1 $\frac{1}{2}$ deg
All others 0-1 deg

Caster

(Loaded)

Axle Model

Clark F-160	4 deg
Clark F-358	3 $\frac{1}{2}$ deg
Clark F-458, F-500...	3 $\frac{1}{4}$ deg
Napco	3 deg

King Pin Slant

Axle Model

Clark F-160	7 $\frac{1}{2}$ deg
Clark F-358, F-458...	8 deg
Clark F-500	9 deg

(TURN TO PAGE 140, PLEASE)

America's Lowest-Priced Pickup!



Only
\$1595

Studebaker Scotsman

Lowest first price, low upkeep and up to 90 more miles to a tank of gas!

Studebaker brings you a rugged all-purpose pickup with unequalled operating economy. The Scotsman's gear ratios are carefully matched to its L-head "6" engine to give top performance with superior gasoline economy . . . this means savings that continue every day. And this high payload pickup comes to you at a price so low that competition can't touch it . . . let's compare for this is where savings start!

Compare these prices!

SCOTSMAN — \$1595* America's lowest-priced pickup!		
Truck D	— \$1854*†	Buy a Scotsman SAVE \$259!
Truck F	— \$1873*	Buy a Scotsman SAVE \$278!
Truck C	— \$1884*	Buy a Scotsman SAVE \$289!
Truck IH	— \$1905*	Buy a Scotsman SAVE \$310!
Truck GM	— \$1969*	Buy a Scotsman SAVE \$374!

Get the complete story on the Scotsman and the full line of Studebaker trucks — see your dealer today.



Studebaker-Packard
CORPORATION

Where pride of Workmanship comes first!

*Price for standard lowest-priced 1/2-ton pickup with box, including servicing for retail delivery. Optional equipment, transportation and local taxes extra.

†Service for retail delivery not included.

TRUCK DATA

STUDEBAKER

Continued from Page 138

CAPACITIES

Crankcase

4E	6 qt
All others	5 qt

Transmission

New Process 420	6.5 pt
Warner T90B	2.5 pt
Opt O'drive...	3.4 pt

Warner T89C	3.0 pt
Opt O'drive...	3.9 pt
Warner T98A	8.0 pt

Rear Axle

Spicer 2211	3 pt
Spicer 60	5½ pt
Tim B-100-N-X-3	9½ pt
Tim D-100-N-X-6	16 pt
Tim E-102-N-X-2	18½ pt
Tim E-302-N-X-7	14 pt
Tim F-146-N-X-1	16 pt
Tim H-140-N-X-9	18 pt
Tim G-346-N-X-6	24 pt
Tim H-340-N-X-12	23 pt
Eaton 1350	14 pt

Cooling System

Truck Model

3E5, 3E10..	Standard: 10½ qt
	H.D. Rad: 13½ qt
3E6, 3E11..	Standard: 15½ qt
	H.D. Rad: 16 qt
3E14	Standard: 16 qt
	H.D. Rad: 16½ qt
3E7, 3E12..	Standard: 20¼ qt
	H.D. Rad: 20¾ qt
Other 3E series...	
	Standard: 20¾ qt
	H.D. Rad: 21¼ qt
3E6D, 3E11D...	
	Standard: 15½ qt
	H.D. Rad: 16 qt
3E14D	Standard: 16 qt
	H.D. Rad: 16½ qt
3E7D, 3E12D...	
	Standard: 20¼ qt
	H.D. Rad: 20¾ qt
3E13D	Standard: 20¾ qt
	H.D. Rad: 21¼ qt

WILLYS

Torque

All engines 28-30 lb-ft

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)
L-4	134.2	4	3⅞ x 4⅜
F-4	134.2	4	3⅞ x 4⅜
L-6	226.2	6	3 5/16 x 4⅜

Oil Pressure

4-cyl engines...	35 psi @ 2000 rpm
6-cyl engines...	35 psi @ 1700 rpm

Compression Pressure

Engine	
L-4	110 psi @ 160 rpm
F-4	125 psi @ 185 rpm
L-6	130 psi @ 140 rpm

IGNITION

Cam Angle (Dwell)

4-cyl engines	37-43 deg
6-cyl engines	36-42 deg

Breaker Point Gap

All engines020 in.

Spark Occurs

(Degrees Before Top Center)

All engines 5 deg

SPARK PLUGS

Make & Type

All engines... AL A-7 or CH J-8

Size

All Engines 14 mm

Gap

All engines030 in.

VALVES

Operating Tappet Clearance

Engine

L-4...	Inlet & Exhaust: .016 in.
F-4	Inlet: .018 in.
	Exhaust: .016 in.
L-6...	Inlet & Exhaust: .014 in.

Seat Angle

Engine

L-4...	Inlet & Exhaust: 45 deg
F-4...	Inlet & Exhaust: 45 deg
L-6	Inlet: 30 deg
	Exhaust: 45 deg

Face Angle

Engine

L-4...	Inlet & Exhaust: 44 deg
F-4...	Inlet & Exhaust: 44 deg
L-6	Inlet: 30 deg
	Exhaust: 44 deg

LUBRICATION

Crankcase

All engines...Use MS type engine oil alone or with MM, ML or DG. Do not use DS type. Above 32 deg use SAE 30; from 10 to 32 deg use SAE 20W; From -10 to 10 deg use SAE 10W. Below -10 deg use SAE 5W.

Transmission

3-speed...Use SAE 90 regular type gear lubricant all year.
3-speed with Overdrive...Use SAE 90 regular mineral oil gear lubricant all year.
Note: Do not use lubricants with Extreme Pressure ingredients.

4- and 5-speed...Use regular gear lubricant. Above 32 deg use SAE 140; Below 32 deg use SAE 90.

Automatic...Use Type A (AQ-ATF) automatic transmission fluid all year.

Rear Axle

Spicer axles...Use SAE 90 hypoid lubricant all year. For models with Twin-Traction differential use SAE 90 high grade hypoid lubricant with sulphur-chlorine-lead base.

Truck model 3E28...Above 32 deg use SAE 140 gear lubricant; Below 32 deg use SAE 90.

Truck models 3E13, 3E14, 3E38 single speed, 3E38 and 3E40 Timken 2-speed...Use Hypoid gear lubricant. Above 32 deg

use SAE 140; Below 32 deg use SAE 90.

Truck model 3E38 with Eaton 2-speed axle...Use Hypoid or E. P. lubricant. From -10 to 100 deg use SAE 90; Below -10 deg use SAE 80; for temperatures consistently over 100 deg use SAE 140.

MODEL NUMBERS

Truck Model...See plate on left door step riser.

Engine Model...Engine number on 6-cyl engines is stamped on machined pad at upper left front of block. On V-8 models the number is on a machined pad adjacent to the oil filler tube.

TENSIONS

Cylinder Head Bolt

4-cyl engines 60-70 lb-ft
6-cyl engines 35-45 lb-ft

VALVE SPRINGS

Free Length

Engine

L-4...
Inner & Outer: 2½ in.
F-4 Inner: 1 31/32 in.
Outer: 2½ in.
L-6...
Inner & Outer: 1 31/32 in.

Pressure

Engine

L-4 120 lb @ 1.75 in.
F-4 153 lb @ 1.40 in.
L-6 107 lb @ 1.312 in.

BATTERY

Amp-Hour Capacity

All models 100

Plates Per Cell

All models 15

Terminal Grounded

All models Neg

FRONT END

Toe-In

All models047-.094 in.

Camber

DJ-3A, 4 x 2 models.. 1 deg
All others 1½ deg

Caster

All models 3 deg

King Pin Slant

All models 7½ deg

CAPACITIES

Crankcase

L-4 4 qt
F-4 4 qt
L-6 5 qt

Transmission

Truck Model

DJ-3A, F4-134 (4x2)... 1½ pt
CJ series 3 pt
F4-134 (4 wd & 4x4)... 3 pt
FC series 3 pt
L-6 series 2½ pt

Rear Axle

DJ-3A, F-134 (4x2)... 2 pt
CJ series, FC-150..... 2½ pt
All others 3 pt

Cooling System

DJ-3A, CJ series 11 qt
FC-150 10 qt
L-6 series 12 qt
All others 11 qt

LUBRICATION

Crankcase

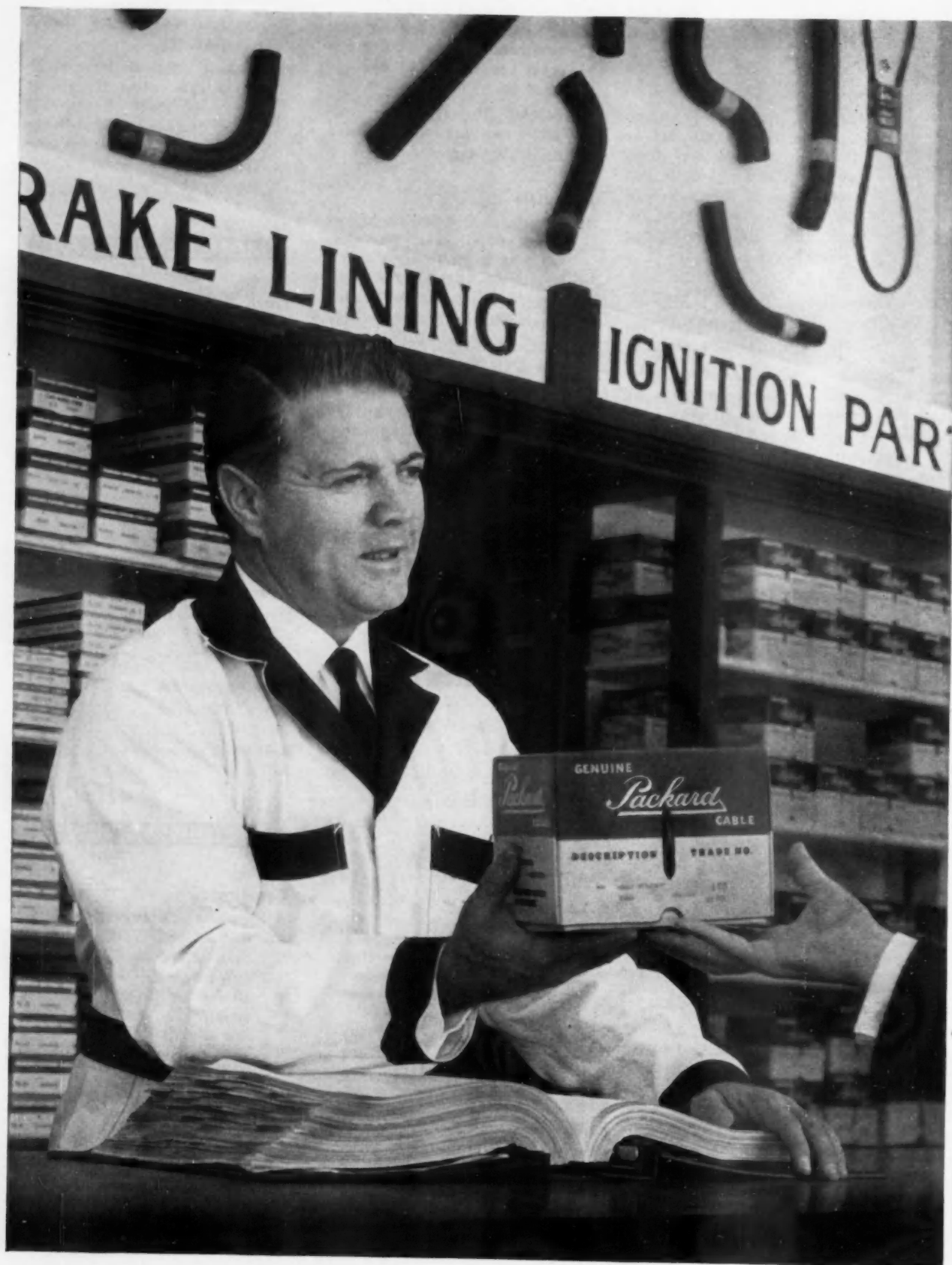
All models...Above 90 deg use SAE 30 or 10W-30. Not lower than 32 deg use SAE 20, 20W, 10W-30 or 10W-20. As low as 10 deg use SAE 20W, 10W-30 or 10W-20. As low as -10 deg use SAE 10W, 10W-30 or 10W-20. Below -10 deg use SAE 5W or 5W-20.

Transmission

All models...Use GL-4 type lubricant. In Summer use SAE 90, in Winter use SAE 80.

Rear Axle

All models...Use SAE 90 GL-4 type lubricant all year.



Fleet operators prefer **PACKARD CABLE** because it delivers more miles of service at less cost per mile

It's a fact—Packard Electric cable leads in replacement sales to fleet operators because experience shows that Packard cable is more economical. It gives the greatest amount of miles and trouble-free service for the cable replacement dollar. Proof of this is the fact that the majority of maintenance award winners in the transportation industry use Packard cable.

Only Packard offers a complete line of automotive cable including engine compartment cable, T.V.R.S. cable in sets and bulk, high and low tension cable, original equipment battery cables and terminals.

Chances are you already use Packard cable. If not, you can be sure it is well worth investigating. There is a Packard cable that is made for your particular application no matter how demanding it may be. And it's available everywhere through the United Motors System.



TRUCK DATA

WALTER

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)
Waukesha 6MZA	404	6	4 1/4 x 4 3/4
Waukesha 140GZ	554	6	4 5/8 x 5 1/2
Waukesha 145GK	779	6	5 1/4 x 6
Waukesha 145GKB	779	6	5 1/4 x 6
Cummins NHB-600	743	6	5 1/8 x 6
Le Roi TH-540	540	8	4 1/2 x 4 1/4

Oil Pressure

Wau 6MZA, 145GK...
40 psi @ 1500 rpm
Other Waukesha engines...
40 psi @ governed speed
Cum NHB-600...
30 psi @ governed speed
Le Roi TH-540...
45 psi @ governed speed

Compression Pressure (At cranking speed)

Wau 6MZA 110 psi
Wau 140GZ 90-95 psi

Wau 145GK 85-90 psi
Wau 145GKB 95-100 psi
Le Roi TH-540 125-140 psi

IGNITION

Cam Angle (Dwell)

Wau engines 31-37 deg
Le Roi TH-540 21-30 deg

Breaker Point Gap

All gasoline engines.. .018 in.



"Make that a sealbeam unit AND a hacksaw!"

Spark Occurs

(Degrees Before Top Center)

Wau engines Top Center
Le Roi TH-540.... 35 deg

SPARK PLUGS

Make & Type

All Wau engines CH J-6
Le Roi TH-540 CH J-8

Size

All gasoline engines... 14 mm

Gap

All Wau engines..... .025 in.
Le Roi TH-540..... .027 in.

VALVES

Operating Tappet Clearance

(Cold Waukesha engines, others are for hot engine)

Wau 6MZAInlet: .009 in.
Exhaust: .019 in.
OthersInlet: .013 in.
Exhaust: .025 in.
Cum NHB-600.....Inlet: .014 in.
Exhaust: .027 in.
Le Roi TH-540...
Inlet & Exhaust: .013 in.

Seat Angle

Wau 140, 145Inlet: 30 deg
Exhaust: 45 deg
Le Roi TH-540..... 45 deg

VALVE SPRINGS

Pressure

(Valve Open)

Wau 6MZA...
110 lb @ 1 31/32 in.
Wau 140GZ...
Inner: 70 lb @ 1 7/16 in.
Outer: 127 lb @ 1 21/32 in.
Wau 145GK, 145 GKB...
Inner: 70 lb @ 2 1/16 in.
Outer: 104 lb @ 2 3/8 in.
Le Roi TH-540...
106 lb @ 1 3/5 in.

TENSIONS

Cylinder Head Bolt

Wau 6MZA 73-75 lb-ft
(TURN TO PAGE 148, PLEASE)

TRUCK WASHERS

STATIONARY and PORTABLE



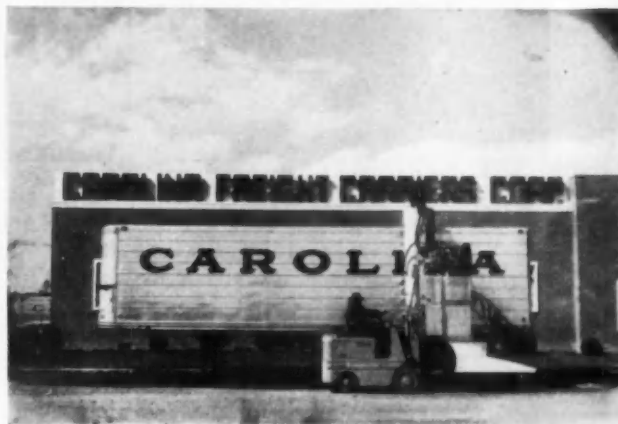
BLACKHALL Stationary Van Washer



New low priced Junior Wilson Convertible Washer for washing vertical and/or horizontal ribbed trailers. Four foot brush can be swivelled to either vertical or horizontal position.



HEAVY DUTY WILSON CONVERTIBLE WASHER for washing vertical and/or horizontal trailers. Nine foot brush can be swivelled to either vertical or horizontal position.



STANDARD WILSON WASHER with nine foot long, 18" diameter brush for washing smooth or horizontally ribbed trailers.

MANUFACTURED EXCLUSIVELY BY

ROSS AND WHITE COMPANY.
CHICAGO DAILY NEWS BUILDING, CHICAGO

ASK FOR BULLETIN No. 107



"COVER" STORY — This trio of canvas-topped trailers is from a fleet of over 600 trucking units owned by The Davidson Transfer & Storage Co. of Baltimore. Operating from 16 major terminals, Davidson trucks carry freight along the Atlantic Seaboard, and household possessions from one end of the country to the other. Extremely conscious of its responsibilities both on the road and off, the company has been awarded more than 40 citations for safety since 1950. Much the same care is exercised to protect cargo in transit. These open-topped trailers, for instance, are equipped with sturdy, protective covers made by A. L. Robertson, Inc., Baltimore, Md. from Mount Vernon No. 6 Water-Resistant Duck.

This is another example of how fabrics made by Mount Vernon Mills, Inc. and the industries they serve, are serving America. Mount Vernon engineers and its laboratory facilities are available to help you in the development of any new fabric or in the application of those already available.

UNIFORMITY
Makes The
Big Difference
In Industrial
Fabrics



Mount Vernon Mills, inc.
A LEADER IN INDUSTRIAL TEXTILES

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Main Office and Foreign Division: 40 Worth Street, New York, N. Y.
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One C.O.E. Tractor—Bought With **EXTRA PROFITS** from Dayton Thorobred Tires

You're not dreaming . . . just 16 tandem rigs can haul enough *extra* revenue producing payload in one year to pay for that new tractor—approximately \$8500. You can IF you equip your rigs NOW with Dayton Thorobred Tires.*

It's true, because lighter, stronger Dayton Thorobreds save so much weight for extra payload. You can actually haul an average of 241 pounds extra payload on each of your tandem trailers.

In addition to making every haul produce more revenue, Dayton Thorobreds show up another place in your profit picture. They reduce your cost per mile.

Deep, tough, specially com-

pounded tread gives outstanding original mileage. Best of all, the super-strength Dayton carcass stands up for recap after recap.

Special Super Cordura Construction makes the rugged Dayton carcass so tremendously strong that it allows excess heat-producing bulk to be eliminated. Less tire-destroying heat gives Dayton tires extra recappability.

Order Dayton Thorobred Tires for your fleet today. And when you order that new tractor or any new equipment, be sure you specify Dayton Thorobred Tires.

*Figures will be sent on request. Write The Dayton Rubber Co., Tire Div., Dayton 1, Ohio.



A Complete Line of Truck and Passenger Car Tires in Nylon, Super Cordura, and Rayon

Dayton Thorobred Tires

Member, ATA Foundation American Trucking Industry

TRUCK DATA



WALTER

Continued from Page 144

Wau 140GZ 175 lb-ft
Wau 145GK, 145GKB...
Long: 175 lb-ft
Short: 150 lb-ft

BATTERY

Amp-Hour Capacity

All models 150

Plates Per Cell

All models 17

SAE Group No.

All models 4D

Terminal Grounded

All models Pos

FRONT END

Toe-In

All models 0-3/16 in.

Camber

All models 1½ deg

Caster

All models 5 deg

King Pin Slant

All models 2 deg

CAPACITIES

Crankcase

Wau 6MZA 8 qt
Wau 140GZ 10 qt
Wau 145GK & GKB 18 qt
Cum NHB-600 28 qt
Le Roi TH-540 12 qt

Transmission

Truck Model

FZM 26 pt
Others 33 pt

Rear Axle

FZM 5 pt
Others 7 pt

Cooling System

FZM 32 qt
Others 57 qt

LUBRICATION

Crankcase

All gasoline models...Use SAE 30 in Summer, SAE 20 in Winter.
All diesel models...Use SAE 20 in Summer, SAE 10 in Winter.

Transmission

All models...Use SAE 140 Extreme Pressure lubricant all year.

Rear Axle

All models...USE SAE 140 Extreme Pressure lubricant all year.

WARD-LAFRANCE

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)
Continental T6427	427	6	4 5/16 x 4 7/8
Continental R6572	572	6	4 3/4 x 5 3/8
Continental R6602	602	6	4 7/8 x 5 3/8
Cummins HB-600	672	6	4 7/8 x 6
Cummins HRB-600	743	6	5 1/8 x 6
Cummins NHB-600	743	6	5 1/8 x 6
Cummins HRF	743	6	5 1/8 x 6

Oil Pressure

(At governed speed)

Con T6427 40-60 psi
Other Con engines .. 50-60 psi
Cummins engines ... 30-50 psi

Compression Pressure

Con T6427...115 psi @ cranking speed

Other Con engines...120 psi @ cranking speed

IGNITION

Cam Angle (Dwell)

Con T6427 31-37 deg
Other Con engines.. 39 deg

Breaker Point Gap

All Con engines020 in.

Spark Occurs

Con T6427...15-17 deg Before Top Center @ 1500 rpm

Other Con engines...5 deg Before Top Center

(TURN TO PAGE 150, PLEASE)



"What do you think of my new tank gage?"

OSHKOSH 4-WHEEL DRIVE "50-50" CONCRETE CARRIER

Really Performs!



Power, 4-wheel traction, stamina — plus easy maneuverability — make the Oshkosh 50-50 your best buy in a ready-mix concrete carrier.



Oshkosh 50-50 hub deep in soft sand at the "Country Club Estates" — a new subdivision adjacent to City of Coronado. Tough going for most rigs — easy for Oshkosh!



It's hard to believe—but the 4-wheel drive Oshkosh 50-50, with 18,000 lb. payload on each axle, pulls through soft sand quickly and easily . . . spots loads anywhere!

SAYS

**SAN DIEGO
TRANSIT-MIXED CONCRETE CO.**
SAN DIEGO 3, CALIFORNIA

Gentlemen:

Your Oshkosh rig really performed. Our others needed planking to do anything, even on relatively firm sand. The Oshkosh 50-50 needed no planking. While it sank down in the soft sand, it never stopped even once.

JOB: "Country Club Estates", new subdivision, City of Coronado, adjacent to North Island, deep sand everywhere.

GENERAL CONTRACTOR: BOSWELL
CONSTRUCTION CO., SAN DIEGO
CONCRETE CONTRACTOR: HARBOR
CONSTRUCTION CO., SAN DIEGO.
KEN STOCKWELL, SUPT.
CONCRETE: SAN DIEGO TRANSIT-MIXED
CONCRETE CO.

Greater payloads! Better traction! More maneuverability! . . . good reasons to choose Oshkosh

Here's the truck specifically engineered and built for the ready-mix concrete industry — backed by over 39 years' experience in manufacturing 4-wheel drive trucks for on-and-off highway hauling. With 18,000 lbs. payload on each axle, the Oshkosh 50-50 lets you spot load where other concrete carriers can't go . . . to get jobs competition can't handle. Write for full information today!

OSHKOSH

**4 WHEEL
and
6 DRIVE
TRUCKS**

OSHKOSH MOTOR TRUCK, INC.
OSHKOSH WISCONSIN

TRUCK DATA

WARD-LAFRANCE

Continued from Page 148

SPARK PLUGS

Make & Type

Con engines CH 8 Com

Size

Con engines 18 mm

Gap

Con engines025 in.

VALVES

Operating Tappet Clearance

(Hot unless noted)

Con T6427 Inlet: .017 in.
Exhaust: .017 in.

Other Con Inlet: .020 in.
Exhaust: .020 in.

Cum HB-600, HRB-600...
Inlet: .014 in.
Exhaust: .022 in.

Cum NHB-600... Inlet: .014 in.
Exhaust: .027 in.

Cum HRF... Inlet: .016 in.
Exhaust: .028 in.

Seat Angle

Cummins engines 30 deg

Face Angle

Cummins engines 30 deg

TENSIONS

Cylinder Head Bolt

Continental engines...

3/8 in.: 35- 40 lb-ft

7/16 in.: 70- 75 lb-ft

1/2 in.: 90-100 lb-ft

9/16 in.: 130-140 lb-ft

5/8 in.: 145-155 lb-ft

Cummins engines 450 lb-ft

VALVE SPRINGS

Pressure

(Valve Open)

Con T6427...

Inner: 57 lb @ 1.458 in.

Outer: 129 lb @ 1.458 in.

Con R6572, R6602...

Inner: 85 lb @ 1.75 in.

Outer: 165 lb @ 1.75 in.

Cummins H series...

186 lb @ 2 3/16 in.

Cummins NHB-600...

110 lb @ 1 27/32 in.

BATTERY

Amp-Hour Capacity

Truck Model

D-1, D-3 series (with 2 batteries) 152

D-5 series (with 4) 152

Plates Per Cell

All models 19

Terminal Grounded

All models Pos

FRONT END

Toe-In

All models 1/16-3/16 in.

Camber

All models 3/4-1 1/2 deg

Caster

All models 1/2-1 1/2 deg

King Pin Slant

All models 5 1/2 deg

CAPACITIES

Crankcase

Con T6427 8 qt

(Add 1 qt for filter)

Other Con engines 14 qt

(Add 4 qt for filter)

Cum HB-600 20 qt

Other Cum engines 28 qt

Transmission

Truck Model

D-1 16 pt

Others 24 pt

Auxiliaries 12 pt

Rear Axle

Truck Model

D-1 31 pt

Other single axles 38 pt

Tandems:

T-2 14 pt

T-4 17 pt

T-7 32 pt

T-8 28 pt

F, H 38 pt

G 34 pt

Cooling System

Con T6427 36 qt

Other Con engines 60 qt

Cummins engines 56 qt

LUBRICATION

Crankcase

Continental engines...Use SAE
40 in Summer, SAE 20 or 10
in Winter

Cummins engines...Use SAE 30
above 80 deg, SAE 20 between
20 and 80 deg, SAE 10 below
20 deg

Transmission

All models....Use SAE 140 in
Summer, SAE 90 in Winter

Rear Axle

All models...Use SAE 140 in
Summer, SAE 90 in Winter




"Well, we got it alright—twin baby sisters, but I think a STORK brought 'em!"

These are **TORQUE WRENCHES** used and recommended by leading engine builders because they are:

- ★ Accurate For Life
- ★ Faster and Handier to use
- ★ The only torque wrenches that can be used accurately with adapters and extensions
- ★ Guaranteed accurate within 2% of maximum scale reading
- ★ Ruggedly constructed for continuous service

SENSORY MODELS		CATALOG NUMBER	CAPACITY INCH POUNDS	MECHANICS SUGGESTED NET PRICE
 <p>The handle RELEASES momentarily the instant the pre-set torque is reached. Can be set to signal for right or left hand applications over full scale range. You can change setting instantly right on the job. A sharp distinct sound can be heard at the same moment the handle signal is felt or you can see the torque applied on an Easy Vision metal scale which serves as a built in Torque Tester. FEEL IT - HEAR IT - SEE IT.</p>		S300-I	0 to 300	\$35.20
		S400-I	0 to 600	34.90
		S1200-I	0 to 1200	38.85
		S1800-I	0 to 1800	47.95
		S2400-I	0 to 2400	61.80
		S3600-I	0 to 3600	82.30
		FOOT POUNDS		
		S25	0 to 25	35.20
		S50	0 to 50	34.90
		S100	0 to 100	38.85
		S150	0 to 150	47.95
		S200	0 to 200	61.80
		S300	0 to 300	82.30

STANDARD MODELS		CATALOG NUMBER	CAPACITY INCH POUNDS	MECHANICS SUGGESTED NET PRICE
 <p>The same as the Sensory model, but is not equipped with the signalling feature. A deluxe gauge tool that is guaranteed to remain accurate for life and is engineered to cycle a minimum 300,000 times.</p>		F300-I	0 to 300	\$24.30
		F400-I	0 to 600	27.15
		F1200-I	0 to 1200	29.95
		F1800-I	0 to 1800	35.70
		F2400-I	0 to 2400	53.95
		F3600-I	0 to 3600	68.70
		FOOT POUNDS		
		F25	0 to 25	24.30
		F50	0 to 50	27.15
		F100	0 to 100	29.95
		F150	0 to 150	35.70
		F200	0 to 200	53.95
		F300	0 to 300	68.70

ROUND BEAM MODELS		CATALOG NUMBER	CAPACITY INCH POUNDS	MECHANICS SUGGESTED NET PRICE
 <p>A torque wrench designed and priced for the time mechanic. Guaranteed life time accuracy. Each model in the wide range of torque capacities is light weight and compact in design. The torque accuracy is held to the highest standard 2% of the maximum scale reading. Patented handle allows using these with adapters and rugged construction makes them almost indestructible.</p>		DR50-I	0 to 50	\$17.95
		DR100-I	0 to 100	17.95
		DR200-I	0 to 200	17.95
		DR300-I	0 to 300	17.95
		R600-I	0 to 600	12.35
		R1200-I	0 to 1200	13.15
		R1800-I	0 to 1800	16.75
		R2400-I	0 to 2400	17.95
		FOOT POUNDS		
		DR25	0 to 25	17.95
		R50	0 to 50	12.35
		R100	0 to 100	13.15
		R150	0 to 150	16.75
		R200	0 to 200	17.95

SPRING TESTER



Permits fast and accurate matching and checking of valve springs, clutch springs, etc. Threaded column with vernier scale permits adjustment of test platform to exact test length within .003 of an inch. Built in tone signal device sounds the instant spring is compressed to desired length. Operated by any accurate torque wrench. Spring strength, in pounds, equals the foot-pound reading of the torque wrench.

Free TORQUE SPECIFICATIONS

For over 72 makes and more than 700 models of automobiles (U.S. and Foreign), trucks, tractors, outboards, motorcycles, diesel, aircraft, marine and small air-cooled engines. **SPARK PLUG-WHEEL BEARING-VALVE SPRING DATA** and many helpful torque tips . . . Plus handy torque chart for all screws -No. 4 to and including large 2 inch bolts. 31 pages of factory approved information. Sent Free if requested on your auto service letter or bill head. Please also write name of your local tool jobber.





PA STURTEVANT CO.
ADDISON QUALITY ILLINOIS

World's Leading Exclusive Manufacturers of Torque Wrenches



FITZJOHN GENERAL MOTORS

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)	
FITZJOHN				
Her JXLD	339	6	4	x 4½
Her WXLD	404	6	4½	x 4¾
Cum JBS-600	401	6	4⅞	x 5
Wau 140 GKB	525	6	4½	x 5½
Cum JT-6-B	401	6	4⅞	x 5
G.M.C.				
Own 270	270	6	3 25/32	x 4
Own 4-71	284	4	4¼	x 5
Own 6-71	426	6	4¼	x 5

Oil Pressure

FITZJOHN

Hercules engines... 26 psi @ 2600 rpm
Wau 140GKB... 40 psi @ 1200 rpm
Cummins engines... 30-60 psi @ governed speed.

G.M.C.

270.... 35-40 psi @ 1000 rpm
4-71, 6-71... 25 psi minimum @ idling speed.

Compression Pressure

FITZJOHN

Her & Wau engines... 90-95 psi @ cranking speed.

G.M.C.

270..... 140 psi @ 125 rpm

IGNITION

Cam Angle

FITZJOHN

All gasoline engines.. 31-37 deg

G.M.C.

270 28-35 deg

Breaker Point Gap

FITZJOHN

All gasoline engines... .022 in.
G.M.C.
270016 in.

Spark Occurs

(Degrees Before Top Center)

FITZJOHN

All gasoline engines.... TC

G.M.C.

270 5 deg

SPARK PLUGS

Make & Type

FITZJOHN

Her JXLD AL TT4
Her WXLD CH J-6
Wau 140GKB CH-9

G.M.C.

270 AC 44 Com

Size

FITZJOHN

Her JXLD 7/8-18

Her WXLD 14 mm
Wau 140 GKB 14 mm
G.M.C.
270 14 mm

Gap

FITZJOHN

All gasoline engines.. .025 in.
G.M.C.
270030 in.

Torque

G.M.C.

270 15-20 lb-ft

VALVES

Operating Tappet Clearance

(Hot unless noted)

FITZJOHN

Her JXLD Inlet: .010 in.
Exhaust: .010 in.
Her WXLD Inlet: .012 in.
Exhaust: .016 in.
Wau 140 GKB... Inlet: .012-.014 in. Cold. Exhaust: .024-.026 in. Cold.
Cum engines..... Inlet: .015 in.
Exhaust: .025 in.

G.M.C.

270 Inlet: .012 in.
Exhaust: .020 in.

Seat & Face Angle

FITZJOHN

Hercules engines 30 deg
Wau 140GKB Inlet: 30 deg
Exhaust: 45 deg
(Note: Add 1/2 deg for Face Angle)

Cummins engines 30 deg

G.M.C.

270.... Inlet & Exhaust: 30 deg

VALVE SPRINGS

Pressure

(Valve Open)

FITZJOHN

Her JXLD... 57.2-62.8 lb @ 1.564 in.
Her WXLD... 97-107 lb @ 2 5/32 in.
Wau 140GKB..... 172-182 lb @ 1 41/64 in.
Cummins engines... 169-187 lb @ 2.0 in.

G.M.C.

270 124 -140 lb
4-71, 6-71 84 1/2- 89 1/2 lb
(TURN TO PAGE 154, PLEASE)

GUNITE MAKES OVER 800 MODELS AND SIZES OF HEAVY DUTY BRAKE DRUMS

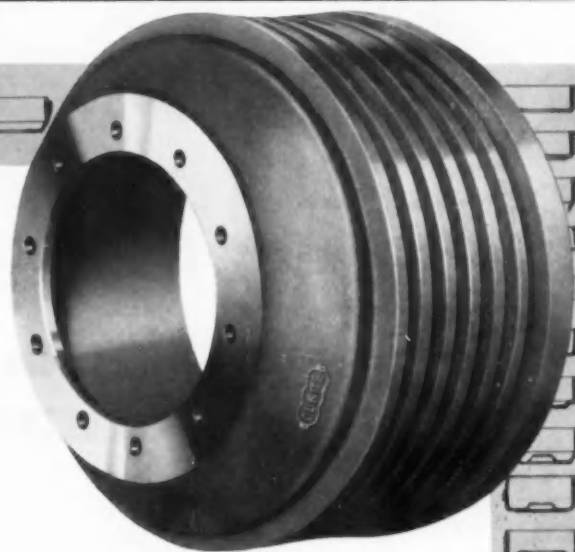
These drawings represent only a few of the wide variety of heavy duty brake drums Gunitite has engineered and produced. Many are built to original equipment specifications, and are readily interchangeable with standard wheel assemblies. Others have been developed by Gunitite's engineering specialists to solve difficult or unusual applications.

Gunitite field engineers are always available for consultation on your brake drum requirements . . . whether it be at the original equipment design stage . . . or for on-the-job problems.

Gunitite brake drums are sold through a national network of leading distributors and dealers. Call the one in your area . . . or call T. D. Schmidt, our Sales Manager of Distributor Products. You'll find prompt service, guaranteed satisfaction, and outstanding performance a Gunitite tradition!



Designers and manufacturers of brake drums and wheels for trucks, trailers, buses, and special equipment.



**HEADQUARTERS FOR
HEAVY-DUTY BRAKE
DRUMS AND WHEELS
FOR TRUCKS, TRAILERS,
BUSES, and SPECIAL
EQUIPMENT**

**GUNITITE FOUNDRIES
CORPORATION**

ESTABLISHED 1854

Rockford, Illinois

BUS DATA



FITZJOHN

GENERAL MOTORS

Continued from Page 152

Pressure

(Valve Closed)

FITZJOHN

Her JXLD...41-56 lb @ 1.920 in.

Her WXL...47½-52½ lb @
2 35/64 in.

Wau 140GKB...70-78 lb @
2 11/64 in.

Cummins engines...81-91 lb @
2.406 in.

G.M.C.

270 53-63 lb

BATTERY

Amp-Hour Capacity

FITZJOHN

Models with Cummins engines...
2 batteries, 150 each

Others 150

G.M.C.

TGH 3102 150

PD 4104 205

Others 175

Plates Per Cell

FITZJOHN

All models 19

G.M.C.

TGH 3102 19

PD 4104 27

Others 17

Terminal Grounded

FITZJOHN & G.M.C.

All models Pos

SAE Group

FITZJOHN

All models 4D

G.M.C.

TGH 3102 4D

PD 4104 8D

Others 8G

FRONT END

Toe-In

FITZJOHN

Bus Model

FTE (Cityliner) 2 in.

FIE, FID (Roadrunner) 1/16 in.

G.M.C.

All models 1/16-1/8 in.

Camber

FITZJOHN

All models 1 deg

G.M.C.

All models 1 deg

Caster

FITZJOHN

Bus Model

FTE (Cityliner) 2 deg

FIE, FID (Roadrunner) 2½ deg

G.M.C.

TGH 3102 4 deg

Others 3 deg

King Pin Slant

FITZJOHN

All models 5½ deg

G.M.C.

TGH 3102 8½ deg

Others 8 deg

CAPACITIES

Crankcase

FITZJOHN

Her JXLD 8.8 qt

Her WXL... 8 qt

Others 12 qt

G.M.C.

Bus Model

TGH 3102 8 qt

TDH 3714 21 qt

PD 4104 29 qt

Others 26 qt

Transmission

FITZJOHN

FTE (Cityliner) 8 pt

FIE, FID (Roadrunner).. 12 pt

G.M.C.

Bus Model

TGH 3102 23 pt

TDH series 56 pt

TDM series 11 pt

PD 4104 21 pt

Rear Axle

FITZJOHN

FTE (Cityliner) 19 pt

FIE (Roadrunner) 23 pt

FID (Roadrunner) 29 pt

FID (Cum JT-6) 23 pt

G.M.C.

Bus Model

TGH 3102 9¼ pt

TDH 3714, 4512 20 pt

TDM 4515 20 pt

TDH 5105, 5106 26 pt

TDM 5108 26 pt

PD 4104 18 pt

Cooling System

FITZJOHN

Models with Her en-
gines 48 qt

Model with Cum

JBS-600 52 qt

Others 56 qt

G.M.C.

Bus Model

TGH 3102 28 qt

TDH 3714 61 qt

PD 4104 73½ qt

Others 72 qt

LUBRICATION

Crankcase

FITZJOHN

Hercules engines...Above 50 deg
use SAE 30 H.D.; Below 50
deg use SAE 20 H.D.

Cummins engines...Use SAE 20
H.D. all year.

Waukesha 140 GKB...Above 50
deg use SAE 40 H.D.; Below
50 deg use SAE 30 H.D.

G.M.C.

270...Above 90 deg use SAE 30;
Between 32 and 90 deg use
SAE 20; Between -10 and
60 deg use SAE 10W; Below
-10 deg use SAE 5W.

4-71, 6-71...Above 60 deg use
SAE 30; Between -10 deg
and 60 deg use SAE 20W;
Below -10 deg use SAE 10W.

Transmission

FITZJOHN

All models...Use SAE 90 straight
mineral gear oil all year.

Rear Axle

FITZJOHN

All models...Use multi-purpose
gear lube. Use SAE 140
above 0 deg, SAE 90 below
-10 deg.



"No maintenance with our Hendrickson Tandems," says Steffke

The Steffke Freight Co., of Wausau, Wisconsin has 13 FWD's equipped with Hendrickson RS Series tandem suspensions, operating in their Midwestern territory.

M. J. Boyle, Jr., President of Steffke, says, "It is our opinion that Hendrickson tandems can't be beat. We've had no maintenance cost in an average of 170,000 miles each and find that they have saved us considerable money in tire wear and tire replacement costs.

"We feel that we should get 300,000 to 400,000 miles on these suspensions before any maintenance is needed. Naturally we are well satisfied with the Hendrickson Sus-

pensions and will definitely specify them on any new Tandem equipment we purchase."

Aluminum saddles and equalizing beams on these units result in a 50% weight savings. The Hendrickson equalizing beam design reduces road irregularity and distributes the load equally between the axles. Complete rubber bushing of all oscillating points and four-point rubber "load cushions" eliminate all need for lubrication . . . also result in a smoother, easier ride during the entire load range, from empty to full.

Hendrickson Tandems stabilize the load, eliminate brake and starting chatter, assure perfect axle align-

ment, and end tire scuffing. For hauling heavier payloads faster, cheaper—under all road and load conditions—equip *your* trucks, tractors and trailers with either steel spring, rubber load cushion, or air ride Hendrickson Suspensions.

Call Hendrickson now, for complete information on your application.



HENDRICKSON MFG. COMPANY
8001 WEST 47th STREET
LYONS (Chicago Suburb), ILLINOIS



BUS DATA

FLXIBLE FLXIBLE-TWIN

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)
FLXIBLE			
Fag FTC 200	451	6	4 $\frac{3}{8}$ x 5
GM 4-71	284	4	4 $\frac{1}{4}$ x 5
White 390 AD	531	6	4 $\frac{3}{4}$ x 5
GM 6-71 E	425.6	6	4 $\frac{1}{4}$ x 5
FLXIBLE-TWIN			
Fag FTC 180	404	6	4 $\frac{1}{4}$ x 4 $\frac{3}{4}$
Fag FTC 200	451	6	4 $\frac{3}{8}$ x 5

Oil Pressure

Engine

All Fageol engines...
 45-55 psi @ 2400 rpm
 GM 4-71... 40 psi @ 2000 rpm
 GM 6-71E... 25 psi minimum
 White 390AD...
 45-55 psi @ 2400 rpm

Compression Pressure

Engine

Fag FTC 180...160 psi @ cranking speed
 Fag FTC 200...155 psi @ 250 rpm
 GM 4-71...390 psi @ cranking speed

IGNITION

Cam Angle (Dwell)

All gas engines..... 31-37 deg

Breaker Point Gap

All Fag engines.. .018-.020 in.
 White 390 AD022 in.

Spark Occurs

(Degrees Before Top Center)

All Fag engines 2 deg
 White 390 AD 6 deg

SPARK PLUGS

Make & Type

All Fag engines CH J-5
 White 390 AD CH 6 Com

Size

All Fag engines 14 mm
 White 390 AD 18 mm

Gap

All Fag engines020 in.
 White 390 AD025 in.

VALVES

Operating Tappet Clearance

All Fag engines...Inlet: .015 in.
 Exhaust: .018 in.
 White 390 AD zero

Seat Angle

All Fag engines 45 deg
 White 390 AD 45 deg
 GM engines 30 deg

Face Angle

All Fag engines 45 deg
 White 390 AD 45 deg

TENSIONS

Cylinder Head Bolt

All Fag engines... 85- 90 lb-ft
 GM engines 165-185 lb-ft

VALVE SPRINGS

Pressure

Valve Open

All Fag engines...
 132-141 lb @ 1 5/16 in.
 White 390 AD...
 175-185 lb @ 1.827 in.
 GM engines...
 140 lb @ 1 51/64 in.

Valve Closed

All Fag engines...
 64-71 lb @ 1 11/16 in.
 White 390 AD...
 90-100 lb @ 2 1/4 in.
 GM engines...
 44 lb @ 2 3/16 in.

BATTERY

Amp-Hour Capacity

Bus Model

All Flxible models 160
 All Flxible-Twin models.. 175

Plates Per Cell

All models 17

Terminal Grounded

All models Pos

FRONT END

Toe-In

All Flxible models..... 1/8 in.
 All Flxible-Twin models...
 1/16-0 in.

Camber

All Flxible models.. 1 1/2-2 deg
 All Flxible-Twin models...
 +1 - -1 deg

Caster

All Flxible models..... 0 deg
 All Flxible-Twin models...
 1 3/4-1 1/4 deg

King Pin Slant

All models 5 1/2 deg

CAPACITIES

Crankcase

All Fag engines.....	12 qt
White 390 AD	15 qt
GM engines	14 qt

Transmission

All Flxible models.....	13 pt
All Flxible-Twin models.	17 pt

Rear Axle

Bus Model

228 FI	20 pt
218 GMI	23 pt
FT-30, FT-33	23-31 pt
FT-35, FT-40	31-30 pt

Cooling System

Bus Model

228 FI	64 qt
218 GMI	58 qt
FT-30, FT-33	63 qt
FT-35, FT-40	66 qt

LUBRICATION

Crankcase

All Fag engines...Above 70 deg use SAE 40; Between 45 and 80 deg use SAE 30; Between 15 and 55 deg use SAE 20; Between 0 and 25 deg use SAE 10.

GM engines...Above 80 deg use SAE 30; Between 20 and 80 deg use SAE 20; Below 20 deg use SAE 10.

Transmission

All Flxible models...Use SAE 50 mineral oil all year.

All Flxible-Twin models...Use SAE 140 mineral oil in Summer, SAE 90 in Winter.

Rear Axle

All Flxible models...Use Military Spec 2-105-B all year.

All Flxible-Twin models...Use SAE 140 Extreme Pressure in Summer, 90 EP in Winter.

SOUTHERN

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)
Fag-Ley FLDH-600	597	6	4 13/16 x 5 1/2
Fag-Ley FLDH-680	677	6	5 x 5 3/4
Fag FTC-180	404	6	4 1/4 x 4 3/4
Cum NHHB-600	743	6	5 1/8 x 6
Wau 6MZA	404	6	4 1/4 x 4 3/4

Oil Pressure

Engine

Fag-Ley FLDH-600...	60-70 lb @ 2100 rpm
Fag-Ley FLDH-680...	70 lb @ 1800 rpm
Fag FTC-180...45 lb @ 2100 rpm	
Cum NHHB-600...	30-50 lb @ 2100 rpm
Wau 6MZA...40 lb @ 1500 rpm	

Compression Pressure

Fag-Ley FLDH-600, FLDH-680...	450-475 psi @ 300 rpm with engine cold.
Fag FTC-180...160 psi @ 250 rpm	
Wau 6MZA...105 psi @ cranking speed.	

IGNITION

Cam Angle (Dwell)

Engine

Fag FTC-180	35 deg
Wau 6MZA	31-37 deg

Breaker Point Gap

Fag FTC-180 .....	.022 in.
Wau 6MZA .....	.018 in.

Spark Occurs

Fag FTC-180...Top Dead Center	
Wau 6MZA...4 deg before TDC	



"And now for the speed test. What time does this transfer expire?"

SPARK PLUGS

Make & Type

Engine

Fag FTC-180.....	CH J5
Wau 6MZA.....	CH 8 Com

Size

Fag FTC-180.....	14 mm
Wau 6MZA	18 mm

Gap

All engines025 in.
-------------------	----------

VALVES

Operating Tappet Clearance (Hot unless noted)

Engine

Fag-Ley FLDH-600, FLDH-680...	
Inlet & Exhaust: .020 in. Cold	
Fag FTC-180 (Cold)...	
Inlet: .015 in.	
Exhaust: .018 in.	
Cum NHHB-600...Inlet: .014 in.	
Exhaust: .027 in.	
Wau 6MZA (Cold)...	
Inlet: .009 in.	
Exhaust: .020 in.	

Seat Angle

Fag-Ley engines	30 deg
Fag FTC-180	45 deg
Cum NHHB-600	30 deg
Wau 6MZA	44 1/2 deg

Face Angle

Fag-Ley engines	29 1/2 deg
Fag FTC-180	45 deg
Cum NHHB-600	30 deg

(TURN TO NEXT PAGE, PLEASE)

BUS DATA

SOUTHERN

Continued from Page 157

TENSIONS

Cylinder Head Bolt

Fag-Ley engines...	155-160 lb-ft
Fag FTC-180....	60-65 lb-ft
Cum NHHB-600...	450 lb-ft
Wau 6MZA.....	75 lb-ft

VALVE SPRINGS

Valve Open Length

Fag-Ley engines..Inner: 1.230 in.	
@ 134 lb pressure; Outer:	
1.481 in. @ 134 lb pressure.	
Fag FTC-180...	
1 5/16 in. @ 132-141 lb	
Cum NHHB-600...	
1 27/32 in. @ 104-114 lb.	
Wau 6MZA...1 21/32 in. @ 101 lb	

Valve Closed Length

Fag-Ley engines..Inner: 1.731 in.	
Outer: 1.981 in.	
Fag FTC-180...	
1 11/16 in. @ 64-71 lb	
Cum NHHB-600...	
2 1/4 in. @ 74-82 lb	
Wau 6MZA...2 11/32 in. @ 64 lb	

BATTERY

Amp-Hour Capacity

Bus	
S-45-DHC	200
All others	168

Plates Per Cell

Bus	
S-45-DHC	25
All others	21

Terminal Grounded

All models	Pos
------------------	-----



"I just had a call from a Miss La Beau wantin' to know th' possibility of puttin' a quicker release on your clutch!"

FRONT END

Toe-In

All models	1/8-1/16 in.
------------------	--------------

Camber

All models	1 1/2 deg
------------------	-----------

Caster

All models	1 deg
------------------	-------

King Pin Slant

All models	5 1/2 deg
------------------	-----------

CAPACITIES

Crankcase

Fag-Ley engines	26 qt
Fag FTC-180	12 qt
Cum NHHB-600	32 qt
Wau 6MZA	15 qt

Transmission

Capacity given is for mechanical section of hydraulic transmission only.

Bus

S-45-DHC	6 pt
All others	3 1/2 pt

Rear Axle

S-36	23 pt
S-41	31 pt
S-45	30 pt

Cooling System

S-45-DHC	84 qt
All others	72 qt

LUBRICATION

Crankcase

Wau 6MZA...Above 70 deg use SAE 40W; Between 50 and 70 deg use SAE 30W; Between 30 and 50 deg use SAE 20W; Below 30 deg use SAE 10W.

Cum NHHB-600...Above 80 deg use SAE 30W; Between 20 and 80 deg use SAE 20W; Below 20 deg use SAE 10W.

All others...Between 50 and 70 deg use SAE 30W; Between 30 and 50 deg use SAE 20W; Below 30 deg use SAE 10W.

Transmission

All models...Use SAE 50 in mechanical section of hydraulic transmissions.

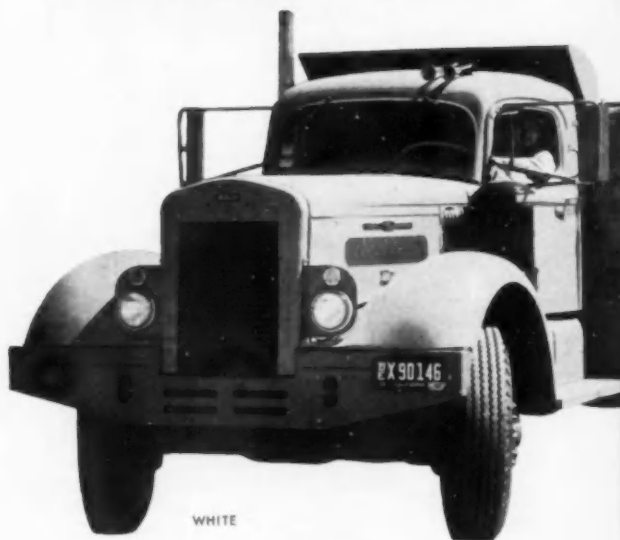
Rear Axle

All models...SAE 140 hypoid gear lube.

Many leading
manufacturers of quality,
wheeled equipment specify

GARRISON

POWER STEERING



LIMA

FWD TERRA-CRUZER



DIAMOND T



DART



WHITE



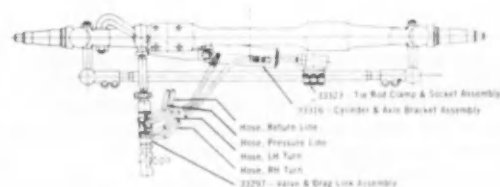
CLARK



Models now available for all medium and heavy trucks, truck cranes, motor graders, and wheeled, material handling and off-the-road equipment.

Leading manufacturers of such wheeled equipment as shown above offer Garrison Power Steering as standard or optional equipment installed at the factory, or in kit form for field installation.

The effortless steering, increased equipment life, greater safety and servicing ease, possible with Garrison Power Steering, have made it the favorite of both operator and owner. Investigate its advantages today.



Power cylinder and control valve installation on a White Truck, WC Model.

4609 East Sheila Street, Los Angeles 22, California

MORE MPG* MORE MBO**

CUMMINS NH-180

in these famous-make tractors!



AUTOCAR
model DCU70T



HENDRICKSON
model BD410F (shown), and
all other on-highway models



KENWORTH
model K-825
(shown),
and all other
on-highway
models



***MORE MPG** means more miles per gallon! The Cummins NH-180, when delivering maximum horsepower or maximum torque to the wheels of on-highway truck-tractors, uses less fuel per brake horsepower hour than any other comparable rig—diesel or gasoline!

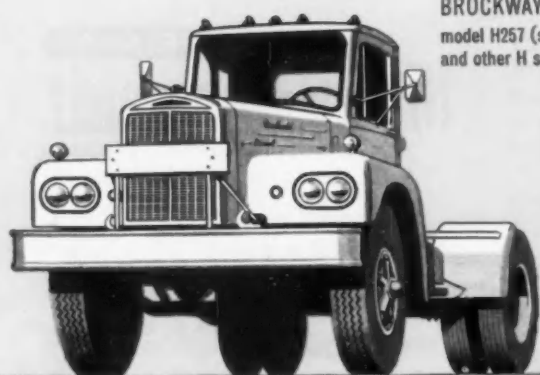
Proven 4-valve Cylinder Heads assure better breathing coupled with sturdier construction. You get improved combustion, cooler operation permitting the highest power output with the most efficient use of No. 2 diesel fuel.

Further, Cummins PT Fuel System has 125-250 fewer parts to make it much simpler and more efficient than other systems. With Cummins PT you are assured low-cost maintenance, high road availability and top fuel economy.

****MORE MBO** means more miles between overhauls! Cummins NH-180 components are identical to those in higher horsepower NH models that are averaging over 350,000 miles before a major overhaul! NH-180 components, under less stress, give even longer engine life.

One overhaul can double the life of the NH-180. Replaceable, wet-type liners mean new engine standards after rebuilds. You'll never have a heat problem either, since this type of liner has been a Cummins standard for years.

Cummins NH Diesels are the most specified diesels in American trucking. They have delivered more satisfactory miles than any other diesel—and bring higher value when sold or traded in. This is the performance you can expect from the Cummins NH-180.



BROCKWAY
model H257 (shown),
and other H series



DIAMOND T
model 923



INTERNATIONAL (Emeryville)
model DC0-405 (shown),
RD-410 series, RD-405 series



INTERNATIONAL (Fort Wayne)
model AC-225D (shown),
ACF-205D, ACF-195D



WHITE
model 3400-TD (shown),
9000-TD, 4400-TD



WHITE-FREIGHTLINER
model WF6342T (shown) and all
other on-highway models

MORE MPG . . . MORE MBO IN ACTION

Here's a partial list of famous fleets who are now adding NH-180 engines.

A&H Truck Line, Inc., Evansville, Indiana

L. G. DeWitt, Ellerbe, N.C.

Gill Interprovincial Lines, Vancouver, B.C.

Great Southern Trucking Co., Jacksonville, Fla.

Lee Way Motor Freight, Inc., Oklahoma City, Okla.

Ray Smith Transport Co., Dallas, Texas

Robertson Transport, Houston, Texas

C. J. Simpson Trucking Co., Dallas, Texas

Strickland Transportation Co., Inc., Dallas, Texas

Cummins Engine Company, Inc., Columbus, Indiana

ENGINE DATA

ALLIS-CHALMERS

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)
4 B-153	153.1	4	3 7/16 x 4 1/8
4 B-182	182.0	4	3 3/4 x 4 1/8
6 B-230	229.7	6	3 7/16 x 4 1/8
6 B-273	273.0	6	3 3/4 x 4 1/8
6 PC-1879, 6 PCS-1879	1879.0	6	6 3/4 x 8 3/4
8 PC-2505, 8 PCS-2505	2505.0	8	6 3/4 x 8 3/4
6 DA-779	779.0	6	5 1/4 x 6
6 DA-844, 6 DAS-844	844.0	6	5 1/4 x 6 1/2
6 DA-970	970.0	6	5 5/8 x 6 1/2
8 DA-1125, 8 DAS-1125	1125.0	8	5 1/4 x 6 1/2
8 DA-1290	1290.0	8	5 5/8 x 6 1/2

Oil Pressure

6 B-230... 20 psi @ 1600 rpm
 6 B-273... 20 psi @ 1800 rpm
 6 PC, 8 PC, 6 PCS, 8 PCS... 50 psi @ governed speed
 6 DA, 8 DA, 6 DAS, 8 DAS... 40 psi @ 1400 rpm

IGNITION

Breaker Point Gap

All gasoline engines...
 .018-.024 in.

Spark Occurs

All gasoline engines... Mark on flywheel

SPARK PLUGS

Make & Type

All gasoline engines... CH J-11

Size

All gasoline engines... 14 mm

Gap

All gasoline engines... .025 in.

Torque

All gasoline engines... 30 lb-ft

VALVES

Operating Tappet Clearance (Hot unless noted)

4 B & 6 B series... Inlet: .010 in.
 Exhaust: .012 in.
 6 PC & 8 PC, 6 PCS & 8 PCS series... Inlet & Exhaust:
 .018 in.
 All diesels (with water temperature @ 160 deg)... Inlet: .012 in.; Exhaust: .015 in.

Seat Angle

All models...
 Inlet & Exhaust: 45 deg

TENSIONS

Cylinder Head Bolt

4 B & 6 B series... 95-105 lb-ft
 PC & PCS series...
 5/8 in. thread: 190-200 lb-ft
 7/8 in. thread: 425-450 lb-ft
 All diesels...
 5/8 in. thread: 190-200 lb-ft
 7/8 in. thread: 385-395 lb-ft

VALVE SPRINGS

Free Length

4 B & 6 B series... 2 3/32 in.
 PC & PCS series... 4 9/32 in.
 All diesels... 3 1/4 in.

Pressure

4 B & 6 B series...
 122-131 lb @ 1 13/32 in.
 PC & PCS series...
 160-165 lb @ 2 31/32 in.
 All diesels...
 200-210 lb @ 2 13/64 in.

CAPACITIES

Crankcase

4 B-153 & 182... 5 qt
 6 B-230 & 273... 6 qt
 6 PC & PCS-1879...
 Pan: 44 qt
 Base: 92 qt
 8 PC & PCS... 120 qt
 6-cyl diesels...
 Highway models... 24 qt
 Off-highway models: 28 qt
 8-cyl diesels...
 Highway models: 30 qt
 Off-highway models: 34 qt

LUBRICATION

Crankcase

All engines... Above 90 deg use SAE 40; Between 32 and 90 deg use SAE 30; Below 32 deg use SAE 20.



"Well, it's gettin' fire for sure!"

in.
in.
in.

in.
in.
in.

qt
qt

qt
qt

qt
qt

use
90
32

this coupon will
bring you a
demonstration
(at no obligation, of course)
of the

FASTEST, MOST
ACCURATE
VALVE
SEAT
GRINDER

you've ever had in your shop
the KWIK-WAY Model SSG
Super Seat Grinder

Let us *prove* to you, in your own shop, that the Kwik-Way Super Seat Grinder is faster and more accurate than any other equipment you can buy. Famous Kwik-Way tapered arbor assures precision. 53° angle drive adjusts to

PRECISION • SPEED • LONG LIFE
get all 3 in

Kwik-Way

ENGINE RECONDITIONING EQUIPMENT

Cedar Rapids Engineering Company
912 17th St. N.E., Cedar Rapids, Iowa

Gentlemen:

- ☐ Please arrange to come in and demonstrate the Model SSG in my shop. I understand there's no obligation on my part.
- ☐ Send me further information and literature.

NAME _____

FIRM NAME _____

ADDRESS _____

CITY _____

STATE _____



suit the job or the operator — makes any in-chassis job easier. Powerful motor delivers extra power and prolongs life of the SSG Seat Grinder. See the *best* in operation. Mail coupon today. No obligation.

CEDAR RAPIDS ENGINEERING CO.
912 17th St. N.E.
CEDAR RAPIDS, IOWA

ENGINE DATA

CONTINENTAL

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)
F4124	124	4	3 3/16 x 4 3/8
F4162	162	4	3 7/16 x 4 3/8
F6186	186	6	3 x 4 3/8
F6209	209	6	3 3/16 x 4 3/8
F6226	226	6	3 5/16 x 4 3/8
M6271	271	6	3 3/8 x 4 3/8
M6290	290	6	3 3/4 x 4 3/8
K6330	330	6	4 x 4 3/8
M6330	330	6	4 x 4 3/8
B6371	371	6	4 1/8 x 4 5/8
T6371	371	6	4 1/8 x 4 5/8
B6427	427	6	4 3/16 x 4 7/8
T6427	427	6	4 5/16 x 4 7/8
U6501	501	6	4 1/2 x 5 1/4
R6513	513	6	4 1/2 x 5 3/8
R6572	572	6	4 3/4 x 5 3/8
R6602	602	6	4 7/8 x 5 3/8
V8603	603	8	4 3/4 x 4 1/4
S6749	749	6	5 3/8 x 5 1/2
S6820	820	6	5 3/8 x 5 1/2
Diesels			
SD6802	802	6	5 9/16 x 5 1/2
TD6427	427	6	4 5/16 x 4 7/8
RD6572	572	6	4 3/4 x 5 3/8
VD8603	603	8	4 3/4 x 4 1/4

Oil Pressure

F6226	30-40 psi
Other F-series	35-40 psi
B, K & M series	40-50 psi
T series	40-60 psi
R, S & U series	55-65 psi
V8603.....50 psi @ 3000 rpm	
SD6802	55-65 psi
TD6427	40-50 psi
RD6572	40-60 psi
VD8603.....50 psi @ 3000 rpm	

Compression Pressure

(At cranking speed)

R, S & U series	120 psi
Other gasoline engines	115 psi
Diesels	375 psi

SPARK PLUGS

Size

V8603	14 mm
All others	18 mm

Gap

All models	.025 in.
------------	----------

VALVES

Operating Tappet Clearance

F series	Inlet: .014 in. Exhaust: .014 in.
M series	Inlet: .017 in. Exhaust: .020 in.

K & T series	Inlet: .018 in. Exhaust: .022 in.
B series	Inlet: .017 in. Exhaust: .022 in.
U6501	Inlet: .016 in. Exhaust: .024 in.
R series	Inlet: .018 in. Exhaust: .024 in.
S series	Inlet: .020 in. Exhaust: .024 in.
V8603	Inlet: .020 in. Exhaust: .028 in.
RD6572	Inlet: .020 in. Exhaust: .024 in.
SD6802	Inlet: .020 in. Exhaust: .024 in.
TD6427	Inlet: .018 in. Exhaust: .022 in.
VD8603	Inlet: .022 in. Exhaust: .024 in.

VALVE SPRINGS

Pressure

(Valve Open)

F4124, F4162...
100 lb @ 1 27/64 in.

Other F series...
103-110 lb @ 1 3/8 in.

M series119 lb @ 1.521 in.

B series144 lb @ 1.316 in.

T series...
Inner: 61 lb @ 1.016 in.
Outer: 130 lb @ 1.110 in.

R6513, R6602...
Inner: 90 lb @ 1.367 in.
Outer: 160 lb @ 1.617 in.

R6572173 lb @ 1.750 in.

S series...
Inner: 100 lb @ 2.031 in.
Outer: 200 lb @ 2.188 in.

V8603...
Inner: 120 lb @ 1.359 in.
Outer: 179 lb @ 1.609 in.

SD6802204 lb @ 2.063 in.

TD6427...
Inner: 100 lb @ 2.031 in.
Outer: 130 lb @ 1.110 in.
Inner: 61 lb @ 1.016 in.

RD6572173 lb @ 1.750 in.

VD8603185 lb @ 1.688 in.

TENSIONS

Cylinder Head Bolt

V8603, VD8603100-110 lb-ft
All others...

3/8 in. thread: 35- 40 lb-ft

7/16 in. thread: 70- 75 lb-ft

1/2 in. thread: 90-100 lb-ft

9/16 in. thread: 130-140 lb-ft

5/8 in. thread: 145-155 lb-ft

NOTHING UNDER THE SUN...

Surpasses **HANSEN** Quality
in Commercial Body Hardware!

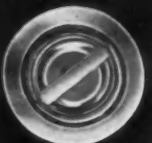
6 reasons why Commercial Body Builders prefer **HANSEN** Hardware

1. The most complete line
2. Lasting, distinctive appearance
3. Simple trouble-free mechanism
4. Highest quality material throughout
5. All-weather, long life durability
6. World-wide distribution and service

Nearly a half century of experience has proven that you can thoroughly depend upon HANSEN Products to withstand the severe strain and abuse generally given to Commercial Body Hardware. Therefore, why accept a substitute? Specify HANSEN and get the BEST!



Model 103
— 3 point
lock and
flush handle.



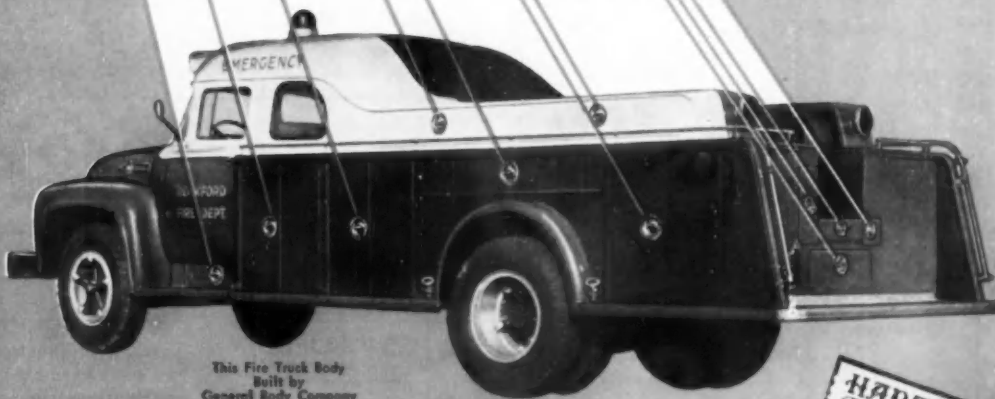
Model 102L — 2
point lock and
flush handle. Front
and back views.



Model 101S — 1
point lock and
flush handle. Front
and back views.



H3571C



This Fire Truck Body
Built by
General Body Company

HANSEN Hardware adds that all-important
finishing touch to all types of Commercial Bodies.

Write for
FREE Catalog

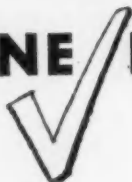


A. L. HANSEN MFG. CO.

5047 RAVENSWOOD AVE.

CHICAGO 40, ILLINOIS

ENGINE DATA



CUMMINS

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)
J series	401	6	4 1/8 x 5
HRG-4, NHC-4	495.4	4	5 1/8 x 6
H-6, HS-6	672	6	4 7/8 x 6
HR series	743	6	5 1/8 x 6
N series	743	6	5 1/8 x 6

Oil Pressure

J series...30-60 psi @ governed speed

All others...30-50 psi @ governed speed

HRS, HSInlet: .016 in.

Exhaust: .028 in.

H, HR, HRCInlet: 0.14 in.

Exhaust: .022 in.

HRBBInlet: .014 in.

Exhaust: .022 in.

N seriesInlet: .014 in.

Exhaust: .027 in.

VALVES

Operating Tappet Clearance

(With oil temperature @ 140 deg)

J seriesInlet: .015 in.
Exhaust: .025 in.

Seat Angle

All modelsInlet: 30 deg
Exhaust: 30 deg

Face Angle

All models 30 deg

TENSIONS

Cylinder Head Bolt

J series 11/16: 240-250 lb-ft

3/4: 380-400 lb-ft

All others 430-450 lb-ft

VALVE SPRINGS

Free Length

J, JF, JS 2.944 in.

JN, JS, JT 2.539 in.

H series 3.484 in.

N series 3.313 in.

Pressure

J, JF, JS187 lb @ 2.0 in.

JN, JS, JT...122 lb @ 1.673 in.

H series...

179.5-198.5 lb @ 2 3/16 in.

N series...

104-114 lb @ 1 27/32 in.

LUBRICATION

All models...Above 90 deg use SAE 30; Between 32 and 90 deg use SAE 20; Below 32 deg use SAE 10W.

Vehicle type	Motor-vehicles registered ¹		Vehicle-miles traveled ¹		Highway-user taxes paid		Average rate of payment		
	Number	Distribution	Amount	Distribution	Amount ²	Distribution	Per vehicle	Per vehicle-mile	Per ton-mile ³
Passenger cars.....	Thous- ands 51,989	Percent 83.83	Millions 485,791	Percent 81.46	1,000 dollars 2,621,668	Percent 65.82	Dollars 50	Cents 0.54	Cents 0.27
Buses.....	142	.22	3,598	.60	66,709	1.68	470	1.85	.20
Single-unit trucks.....	9,345	15.07	85,731	14.38	815,085	20.46	87	.95	.26
Combinations.....	544	.88	21,231	3.56	479,430	12.04	881	2.25	.12
All trucks and combinations.....	9,889	15.95	106,962	17.94	1,294,515	32.50	131	1.21	.18
All vehicles.....	62,030	100.00	596,321	100.00	3,982,892	100.00	64	.67	.23

¹ Private and commercial vehicles. Publicly owned vehicles other than transit buses are omitted.

² Excludes fines and penalties amounting to \$17,860,000, tax payments of \$16,897,000 assigned to light trailers, and \$8,008,000 assigned to motorcycles.

³ Per ton-mile of average operating gross weight.

What Share Do Trucks Pay?

Here's an answer to questions of how passenger cars, buses, trucks and combinations compare when it comes to registrations, vehicle-miles, highway-user tax payments. Based on latest available data (1955), the chart was included in the February, 1958, issue of the magazine Public Roads, published by the Bureau of Public Roads.

HALL-SCOTT

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)
136 series (horizontal)	477	6	4½ x 5
180 series (horizontal)	707	6	5 x 6
190 series (horizontal)	779	6	5¼ x 6
400 series	1090	6	5¾ x 7
470 series	855	6	5½ x 6
480 series	935	6	5¾ x 6
504 series	504	6	4¾ x 5
590 series (horiz. or vert.)	590	6	5 x 5
855 series	855	6	5½ x 6
935 series	935	6	5¾ x 6
1091 series	1090	6	5¾ x 7
6156	935	6	5¾ x 6
6182	1091	6	5¾ x 7

Oil Pressure

400, 470, 480 series...60 psi @ 1000-1200 rpm Hot	400 series	34-39 deg
All others... 10 psi @ 350 rpm	470, 480 series	37-39 deg
136 series...60 psi @ 2400 rpm	590-1091 series	34-37 deg
180, 190 series... 80 psi @ 2200 rpm	6156, 6182 series	27-37 deg
504 series...60 psi @ 2400 rpm		
590 series...60 psi @ 2800 rpm		
6156...60 psi @ 2400 rpm		

Compression Pressure

136, 180 series... 6:1 ratio—120 psi	136-190, 504 series...	7.7 deg
190 series...5.5:1 ratio—110 psi @ 1000 rpm	400, 470, 480 series...	2 deg
400, 470, 480 series...5.7:1 ratio standard, 129 psi @ 1000 rpm	590 series...Gasoline:	5 deg
504 series...6:1 ratio standard, 120 psi	L.P.G.:	10 deg
590 series...Gasoline—6.6:1 ratio standard, 135 psi. L.P.G.—8.7:1 ratio, 200 psi	855 series...Gasoline:	6 deg
855 series...Gasoline—6:1 ratio standard, 116 psi. L.P.G.—9:1 ratio 200 psi	L.P.G.:	11 deg
935 series...Gasoline—6.4:1 ratio standard, 128 psi. L.P.G.—9:1 ratio, 210 psi	935, 6156...Gasoline:	2 deg
1091 series...Gasoline—6.4:1 ratio standard, 128 psi. L.P.G.—8.8:1 ratio, 205 psi.	L.P.G.:	4 deg
	1091, 6182...Gasoline:	2 deg
	L.P.G.:	8 deg

IGNITION

Cam Angle (Dwell)

136-190, 504 series...	37 deg
------------------------	--------

Breaker Point Gap

400, 470, 480 series...	.015 in.
590 series	.022 in.
All others	.021 in.

Spark Occurs

(Degrees Before Top Center)

136-190, 504 series...	7.7 deg
400, 470, 480 series...	2 deg
590 series...Gasoline:	5 deg
L.P.G.:	10 deg
855 series...Gasoline:	6 deg
L.P.G.:	11 deg
935, 6156...Gasoline:	2 deg
L.P.G.:	4 deg
1091, 6182...Gasoline:	2 deg
L.P.G.:	8 deg

SPARK PLUGS

Make & Type

136, 504 series...	CH 6 Com
180, 190 series...	Inlet: CH 8 Com
	Exhaust: CH 6 Com
590 series	CH J-5
All other gasoline...	Inlet: CH 9 Com
	Exhaust: CH 6 Com
All other L.P.G....	Inlet: CH 6 Com
	Exhaust: CH 4 Com

Size

590 series	14 mm
All others	18 mm

Gap

590 series	Gasoline: .025 in.
	L.P.G.: .015 in.
All others	.018-.023 in.

VALVES

Operating Tappet Clearance

(Cold unless noted)

136, 504 series...	Inlet & Exhaust: .025 in.
180, 190, 590 series...	Inlet & Exhaust: .022 in.
All other engines...	Inlet: .021 in.
	Exhaust: .031 in.

Seat Angle

136, 504 series...	Inlet: 30-30½ deg
	Exhaust: 45-45½ deg
590 series...	Inlet & Exhaust: 45 deg
All others	Inlet: 30 deg
	Exhaust: 45 deg

Face Angle

136, 504 series...	Inlet: 29½-30 deg
	Exhaust: 44½-45 deg
590 series...	Inlet & Exhaust: 45-45¼ deg
180, 190 series...	Inlet: 30 deg
	Exhaust: 45 deg
All others...	Inlet: 30 deg
	Exhaust: 44½-44¾ deg

VALVE SPRINGS

Pressure

(Valve Open)

136, 504 series...	Inner: 72 lb @ 1.882 in.
	Outer: 124 lb @ 1.950 in.
590 series...	Inner: 80 lb @ 1.750 in.
	Outer: 116 lb @ 1.812 in.
835, 935, 1091 series...	Inner: 105 lb @ 1.938 in.
	Outer: 138 lb @ 2.000 in.
All others...	Inner: 110 lb @ 1.938 in.
	Outer: 143 lb @ 2.000 in.

ENGINE DATA

DEUTZ, LE ROI

ENGINES

Engine Model	Displacement (cu. in.)	Cyl	Bore & Stroke
LE ROI			
TH 540	540	V-8	4 1/2 x 4 1/4
TH 844	844	V-8	5 1/4 x 4 7/8
DEUTZ (Air cooled Diesels)			
F4L 514	324.6	4	4 3/8 x 5 1/2
F6L 514 (in line)	486.9	6	4 3/8 x 5 1/2
F6L 614	486.9	V-6	4 3/8 x 5 1/2
F8L 614	649.2	V-8	4 3/8 x 5 1/2
F12L 614	973.8	V-12	4 3/8 x 5 1/2

Oil Pressure

Le Roi

TH540....	35 psi @ 2000 rpm
TH844....	45 psi @ 2000 rpm

Deutz

All models.	60 psi @ 2000 rpm
-------------	-------------------

Compression Pressure

Le Roi

All models...	125 psi @ cranking speed.
---------------	---------------------------

Deutz

All models...	300 psi @ 80-100 rpm
---------------	----------------------

IGNITION

Cam Angle (Dwell)

All Le Roi engines..	21-30 deg
----------------------	-----------

Breaker Point Gap

All Le Roi engines....	.016 in.
------------------------	----------

Spark Occurs

(Degrees Before Top Center)

Le Roi

TH540	@ 600 rpm: 5 deg
	@ 2800 rpm: 35 deg
TH844	@ 600 rpm: 4 deg
	@ 2600 rpm: 32 deg

SPARK PLUGS

Make & Type

All Le Roi engines....	CH J-6
------------------------	--------

Size

All Le Roi engines....	14 mm
------------------------	-------

Gap

All Le Roi engines	.020-.030 in.
--------------------	---------------

Torque

All Le Roi engines.	25-30 lb-ft
---------------------	-------------

VALVES

Operating Tappet Clearance

Le Roi

All models...	Inlet & Exhaust: .013 in. Hot
---------------	-------------------------------

Deutz

All models...	Inlet & Exhaust: .004-.008 in.
---------------	--------------------------------

Seat Angle

All Le Roi engines....	45 deg
All Deutz engines	45 deg

Face Angle

All Le Roi engines....	45 deg
All Deutz engines....	45 deg

TENSIONS

Cylinder Head Bolt

All Le Roi engines...	60 lb-ft
-----------------------	----------

Manifold Bolt

All Le Roi engines...	90 lb-ft
-----------------------	----------

VALVE SPRINGS

Free Length

Le Roi TH540.....	2 29/64 in.
Le Roi TH844.....	2 3/4 in.

Pressure

Le Roi

TH540	valve open: 110 lb
	valve closed: 56 lb
TH844	valve open: 136 lb
	valve closed: 61 lb

BATTERY

Amp-Hour Capacity

Le Roi

All models	145
------------------	-----

Deutz

FHL514	105
Others	120

Plates Per Cell

Le Roi

All models	21
------------------	----

Deutz

F12L614	24
Others	12

Terminal Grounded

All Le Roi models.....	Pos
All Deutz models.....	Neg

LUBRICATION

Le Roi

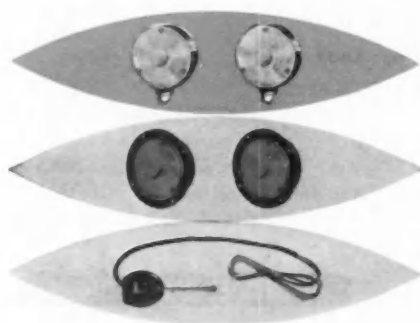
All models...Above 90 deg use SAE 40. From 32 to 90 deg use SAE 30. From 0 to 32 deg use SAE 20W. Below 0 deg use SAE 10W.

Deutz

All models...Use SAE 30 in Summer, SAE 20 or 20W in Winter. Below -4 deg use SAE 10W.



Guide's High Visibility Reflectors and Turn Signals mean all-weather safety for your truck fleet !



Turn signal set has four lamps, self-cancelling switch...choice of bracket or flush mounting for rear lamps

Most often, trucks can't stop for bad weather. They must be on the road in rain, snow and sleet. It is in such weather, when visibility is low, that the danger of rear-end collisions rises sharply. And there's not much that even your best driver can do to avoid this hazard, if his truck is not clearly visible from the rear. Guide's high-visibility reflectors and turn signals can help prevent needless and costly delays. Because of their dependability and uniformly high quality, Guide reflectors and signals are specified as standard equipment by many leading vehicle manufacturers. Available at United Motors Service outlets and most truck dealers.



Guide Lamp ... BRIGHTEST NAME IN LIGHTS

GUIDE LAMP DIVISION • GENERAL MOTORS CORPORATION • ANDERSON, INDIANA

COMMERCIAL CAR JOURNAL, April, 1958

ENGINE DATA



HERCULES

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)	
ZXB	65	4	2 $\frac{5}{8}$	x 3
IXA	113	4	3	x 4
IXB	133	4	3 $\frac{1}{4}$	x 4
IXLB	141	4	3 $\frac{1}{4}$	x 4 $\frac{1}{4}$
JX4-C	188	4	3 $\frac{3}{4}$	x 4 $\frac{1}{4}$
JX4-D	214	4	4	x 4 $\frac{1}{4}$
QXC-3	221	6	3 $\frac{3}{8}$	x 4 $\frac{1}{8}$
QXD-3	230	6	3 $\frac{7}{16}$	x 4 $\frac{1}{4}$
QXLD-3	237	6	3 $\frac{7}{16}$	x 4 $\frac{1}{4}$
JXC-6	282	6	3 $\frac{3}{4}$	x 4 $\frac{1}{4}$
JXD-6	320	6	4	x 4 $\frac{1}{4}$
JXLD	339	6	4	x 4 $\frac{1}{2}$
WXLC-3	404	6	4 $\frac{1}{4}$	x 4 $\frac{3}{4}$
TDXB	474	6	4 $\frac{3}{8}$	x 5 $\frac{1}{4}$
TDXC	501	6	4 $\frac{1}{2}$	x 5 $\frac{1}{4}$
RXC	529	6	4 $\frac{5}{8}$	x 5 $\frac{1}{4}$
RXLDH	558	6	4 $\frac{3}{4}$	x 5 $\frac{1}{4}$
HXE, HXLE	935	6	5 $\frac{3}{4}$	x 6
Diesels				
DIX4D	166	4	3 $\frac{5}{8}$	x 4
DOOD	255	4	4 $\frac{1}{4}$	x 4 $\frac{1}{2}$
DIX6D	248	6	3 $\frac{5}{8}$	x 4
DIX6-272	272	6	3 $\frac{11}{16}$	x 4 $\frac{1}{4}$
DJXC, DJXH, DJXHF	298	6	3 $\frac{3}{4}$	x 4 $\frac{1}{2}$
DWXD, DWXDS	404	6	4 $\frac{1}{4}$	x 4 $\frac{3}{4}$
DWXLD, DWXLD	426	6	4 $\frac{1}{4}$	x 5
IRXB	474	6	4 $\frac{3}{8}$	x 5 $\frac{1}{4}$
TCD-501	501	6	4 $\frac{1}{2}$	x 5 $\frac{1}{4}$
DRXC	529	6	4 $\frac{5}{8}$	x 5 $\frac{1}{4}$
DFXD	855	6	5 $\frac{1}{2}$	x 6
DFXE, TCD-895	895	6	5 $\frac{5}{8}$	x 6
DFXH, DFXHF	935	6	5 $\frac{3}{4}$	x 6
DNXV8D	1468	8	6 $\frac{1}{4}$	x 6

Oil Pressure

ZXB.....	15 psi @ 1000 rpm
IXA, IXB, IXLB...	20 psi @ 1000 rpm
JX- & QX-series...	26 psi @ 2000 rpm
WXLC-3, RXC...	26 psi @ 2000 rpm
TDXB, TDXC...	25 psi @ 1000 rpm

RXLDH.....	36 psi @ 2000 rpm
HXE, HXLE...	35 psi @ 1600 rpm
DIX series...	30 psi @ 1200 rpm
DOOD, DRXB, TCD-501,	DRXC...30 psi @ 2000 rpm
DJX- series...	45 psi @ 2000 rpm

DWX- series...

40 psi @ 1600 rpm

DFX- series, TCD895...

50 psi @ 1600 rpm

IGNITION

Breaker Point Gap

All models018-.020 in.

Spark Occurs

All models...Mark on flywheel

VALVES

Operating Tappet Clearance

(Hot unless noted)

ZXB	Inlet: .006 in.
	Exhaust: .006 in.
IX-series	Inlet: .006 in.
	Exhaust: .008 in.
JX-series	Inlet: .008 in.
	Exhaust: .010 in.
QX-series	Inlet: .006 in.
	Exhaust: .008 in.
JXLD	Inlet: .010 in.
	Exhaust: .010 in.
WXLC-3	Inlet: .012 in.
	Exhaust: .016 in.
H. R. T-series	Inlet: .010 in.
	Exhaust: .016 in.
DIX-, DJX-series, DOOD...	Inlet & Exhaust: .010 in.
DWX-series (Cold)...	Inlet & Exhaust: .016 in.
DRXB, -C, TCD-501...	Inlet & Exhaust: .016 in.
DFX-series, TCD-895...	Inlet: .010 in.
	Exhaust: .016 in.

Seat Angle

JX-series, RXC...	Inlet & Exhaust: 45 deg
Other gasoline engines...	Inlet & Exhaust: 30 deg
All diesel engines...	Inlet & Exhaust: 45 deg

VALVE SPRINGS

Pressure

(Valve Open)

ZXB	35 lb @ 0.922 in.
IX-series	42 lb @ 1.188 in.
JX-series	58 lb @ 1.594 in.
QX-series	41 lb @ 1.281 in.
RX-series, WXLC-3...	102 lb @ 2.156 in.

TDXB, TDXC...	100 lb @ 3.188 in.
HXE, HXLE...	Inner: 50 lb @ 2.813 in.
	Outer: 85 $\frac{3}{4}$ lb @ 3.156 in.
DIX-, DJX-series, DOOD...	Inner: 37 lb @ 1.281 in.
	Outer: 55 lb @ 1.406 in.
DWX-series...	Inner: 74 lb @ 1.484 in.
	Outer: 84 lb @ 1.578 in.
DRX-series, TCD-501...	Inner: 30 lb @ 1.355 in.
	Outer: 48 lb @ 1.449 in.
DFX-series, TCD-895...	Inner: 57 lb @ 2.656 in.
	Outer: 94 lb @ 2.969 in.

TENSIONS

Cylinder Head Bolt

ZXB	35 lb-ft
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IX-series	40 lb-ft
JX-series	75 lb-ft
QX-series	60 lb-ft
TDXB, TDXC	100 lb-ft
WXLC-3, RXLDH ...	100 lb-ft
RXC	85 lb-ft
HXE, HXLE	105 lb-ft
DRX-series, TCD-501...	$\frac{5}{8}$ in. thread: 175 lb-ft
	1 in. thread: 280 lb-ft
Other diesels	158 lb-ft

CAPACITIES

Crankcase

ZXB	3 qt
IX-series	5 $\frac{1}{2}$ qt
JX4C & D	5 qt
QX-series	6 qt
WXLC-3	7 qt
JXC-6, JXD-6, JXLD...	8 $\frac{1}{2}$ qt

RX-, TDX-series	10 qt
HXE, HXLE	16 qt
DIX4D, DJXC & H....	6 qt
DIX6-series	8 qt
DOOD	10 qt
DWXd, DRXB, DRXC	15 qt
DWXLd, TCD-501 ...	15 qt
DWXLDF	20 qt
DJXHF	27 qt
DFX-series, TCD-895..	28 qt

LUBRICATION

Crankcase

All models... Use H. D. engine oil.
Above 60 deg use SAE 30;
Between 10 and 60 deg use
SAE 20; Between -10 and
10 deg use SAE 10; Below
-10 deg use SAE 5W.

WAUKESHA

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)
190GLB	265	6	3 $\frac{3}{4}$ x 4
195GKA	320	6	4 $\frac{1}{8}$ x 4
MZA	404	6	4 $\frac{1}{4}$ x 4 $\frac{3}{4}$
135GKB	426	6	4 $\frac{1}{8}$ x 5
135GZB	451	6	4 $\frac{3}{8}$ x 5
140GK, 140GKB	525	6	4 $\frac{5}{8}$ x 5 $\frac{1}{2}$
140GZB	554	6	4 $\frac{5}{8}$ x 5 $\frac{1}{2}$
145GK, 145GKB	779	6	5 $\frac{1}{4}$ x 6
145GZB	817	6	5 $\frac{3}{8}$ x 6
WAKB	1197	6	6 $\frac{1}{4}$ x 6 $\frac{1}{2}$
Diesels			
190DLCA	265	6	3 $\frac{3}{4}$ x 4
195DLCA	302	6	4 x 4
135DKB, 135DKBS	426	6	4 $\frac{1}{4}$ x 5
148DKB, 148DKBS	779	6	5 $\frac{1}{4}$ x 6
WAKDB, WAKDBS	1197	6	6 $\frac{1}{4}$ x 6 $\frac{1}{2}$

Oil Pressure

190GLB... 12-15 psi @ governed speed

MZA, WAKB...

40 psi @ 1500 rpm

135GKB, 135GZB...

30 psi @ 1800 rpm

Other gasoline engines...

40 psi @ governed speed

190DLCA...

15 psi @ 1500 rpm

195DLCA...	30 psi @ 2000 rpm
135DKB, 135DKBS...	40 psi @ 2200 rpm
148DKB, 148DKBS...	40 psi @ 1500 rpm
WAKDB, WAKDBS...	40 psi @ 1300 rpm

Compression Pressure (At cranking speed)

MZA	105 psi
195GKA	110 psi
145GK, WAKB	115 psi
Other gas engines....	120 psi
190, 195DLCA	375 psi
148DKB, 148DKBS ...	435 psi
135DKB, 135DKBS ...	450 psi
WAKDB, WAKDBS ...	450 psi

IGNITION

Cam Angle (Dwell)

All gasoline engines... 31-37 deg

Breaker Point Gap

All gasoline engines.... .018 in.

(TURN TO NEXT PAGE, PLEASE)

ENGINE DATA

WAUKESHA

Continued from Page 171

SPARK PLUGS

Size

190GLB, 195GKA	18 mm
MZA, WAKB	18 mm
All others	14 mm

Gap

All engines	.025 in.
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VALVES

Operating Tappet Clearance (Cold engine)

190GLB	Inlet: .010 in.	Exhaust: .016 in.
195GKA	Inlet: .015 in.	Exhaust: .023 in.
MZA	Inlet: .009 in.	Exhaust: .020 in.
135 series	Inlet: .011 in.	Exhaust: .023 in.

140 series	Inlet: .013 in.	Exhaust: .019 in.
145GK	Inlet: .013 in.	Exhaust: .024 in.
145GKB & GZB	Inlet: .013 in.	Exhaust: .030 in.
WAKB	Inlet: .014 in.	Exhaust: .023 in.
190DLCA	Inlet: .010 in.	Exhaust: .020 in.
195DLCA	Inlet: .010 in.	Exhaust: .022 in.
135DKB, DKBS	Inlet: .011 in.	Exhaust: .023 in.
148DKB, DKBS	Inlet: .015 in.	Exhaust: .028 in.
WAKDB, WAKDBS	Inlet: .014 in.	Exhaust: .024 in.

Seat Angle

195GLB	Inlet: 45 deg	Exhaust: 45 deg
195GKA, 135 series	Inlet: 44½ deg	Exhaust: 44½ deg
140, 145 series	Inlet: 30 deg	Exhaust: 45 deg
WAKB	Inlet: 30 deg	Exhaust: 44½ deg

135DKB, 135DKBS...

Inlet:	30 deg
Exhaust:	45½ deg

WAKDB, WAKDBS...

Inlet:	30 deg
Exhaust:	45 deg

Other diesels...

Inlet & Exhaust:	45 deg
------------------	--------

VALVE SPRINGS

Pressure

(Valve Open)

190GLB	71 lb @ 1.594 in.
195GKA	114-134 lb @ 1.938 in.
MZA	101 lb @ 1.656 in.
135 series	154-170 lb @ 1.859 in.
140GK	Inner: 55 lb @ 1.438 in.
	Outer: 86 lb @ 1.656 in.
140GKB, 140GZB	Inner: 70 lb @ 1.438 in.
	Outer: 127 lb @ 1.656 in.
145GK	Inner: 81 lb @ 2.063 in.
	Outer: 118 lb @ 2.375 in.
145GKB	Inner: 100 lb @ 2.063 in.
	Outer: 158 lb @ 2.375 in.
145GZB	Inner: 81 lb @ 2.063 in.
	Outer: 118 lb @ 2.375 in.
190DLCA	65-77 lb @ 1.594 in.
195DLCA	114-134 lb @ 1.938 in.
135DKB, 135DKBS	162 lb @ 2.313 in.
148DKB, 148DKBS	Inner: 81 lb @ 2.063 in.
	Outer: 118 lb @ 2.375 in.

TENSIONS

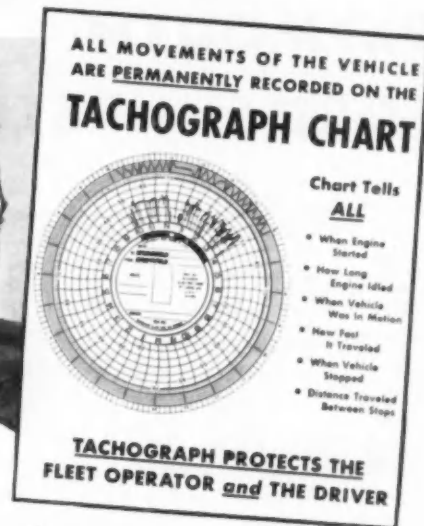
Cylinder Head Bolt

190GLB, 195GKA	92-100 lb-ft
MZA	73- 75 lb-ft
135, 140 series	175 lb-ft
145GK, 145GKB	Long: 175 lb-ft
	Short: 150 lb-ft
145GZB	Long: 200 lb-ft
	Short: 175 lb-ft
WAKB	140-150 lb-ft
190, 195DLCA	96-100 lb-ft
135DKB, DKBS	100-133 lb-ft
Other diesels	250-267 lb-ft



John E. McCarthy, president of Fifth Avenue Coach Lines, Inc., New York City, recently received the Department of Defense Reserve Award certificate on behalf of his firm. Making the presentation was Col. Walter D. McCahan, Chief of Staff, U. S. Army Military District, New York. The award was made for "outstanding co-operation with the Armed Forces Reserve Program."

for little more than **2¢** per day
 ...wouldn't you like to have a "fleet supervisor"
 on every truck...on every run?



Wagner-Sangamo Tachograph

automatically and permanently records
 vital trip information for you

You can have a "phantom supervisor" riding along with each of your drivers... and get vital trip information costing you little more than 2¢ per day. How? ... With Tachographs. When you equip your trucks with Tachographs, it's like having your own fleet supervisor ride on every trip... without leaving his desk. You get facts, and can act accordingly.

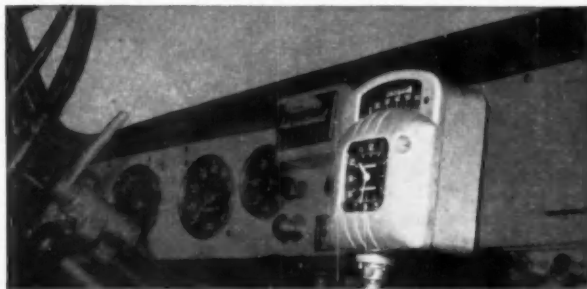
At the beginning of each run, a wax-coated chart (costing little more than 2¢) is placed inside the tamper-proof Tachograph mounted on dash. It is on this chart that all vital trip information is automatically recorded. Chart tells when engine started, when idled, when vehicle was in motion, how fast it traveled, and when

it stopped and for how long. Tachographs also indicate the time of day and total mileage.

Tachograph's red warning light signals the driver whenever your predetermined maximum speed is exceeded. This encourages safer driving and reduces operating costs.

The charted information can be used to improve fleet safety, to effect savings on fuel and tires, to help establish proper routing, and supply data to protect you and the driver in court cases involving accident claims.

Tachograph models are available in two types: M.P.H. and R.P.M. For complete information, mail coupon for free copy of Bulletin SU-3.



Wagner Electric Corporation

6476 PLYMOUTH AVE., ST. LOUIS 14, MO.

Please send a copy of Bulletin SU-3.

Name and Position _____

Company _____

Address _____

City _____ State _____

We operate _____ Vehicles
 (NUMBER)

LOCKHEED BRAKE PARTS, FLUID, EXCHANGE SHOES and LINING • AIR HORNS • AIR BRAKES • TACHOGRAPHS • ELECTRIC MOTORS • TRANSFORMERS • INDUSTRIAL BRAKES

FLEET CAR DATA

CHEVROLET DODGE PLYMOUTH RAMBLER FORD STUDEBAKER

ENGINES

Engine Model	Displacement (cu in.)	Cyl	Bore & Stroke (in.)
Chevrolet 235	235.5	6	3 9/16 x 3 15/16
Chevrolet 283	283.0	8	3 7/8 x 3
Chevrolet 348	348.0	8	4 1/8 x 3 1/4
Dodge 230	230.0	6	3 1/4 x 4 5/8
Dodge 325	325.0	8	3 11/16 x 3 51/64
Dodge 350	350.0	8	4 1/16 x 3 3/8
Dodge 361	361.0	8	4 1/8 x 3 3/8
Ford 223	223.0	6	3 5/8 x 3 39/64
Ford 292	292.0	8	3 3/4 x 3 19/64
Ford 332	332.0	8	4 x 3 19/64
Ford 352	352.0	8	4 x 3 1/2
Plymouth 230	230.0	6	3 1/4 x 4 5/8
Plymouth 318	318.0	8	3 29/32 x 3 5/16
Plymouth 350	350.0	8	4 1/16 x 3 3/8
Rambler 195	195.6	6	3 1/8 x 4 1/4
Rambler 250	250.0	8	3 1/2 x 3 1/4
Rambler 327	327.0	8	4 x 3 1/4
Studebaker 185	185.6	6	3 x 4 3/8
Studebaker 259	259.0	8	3 9/16 x 3 1/4
Studebaker 289	289.0	8	3 9/16 x 3 5/8

Oil Pressure

Engine

All Chevrolet...	35 psi @ 2000 rpm
Dodge 230...	40-45 psi @ 1500 rpm
Dodge 325...	40-65 psi @ 2000 rpm
Dodge 350, 361...	50-65 psi @ 1500 rpm
Ford 223...	45-50 psi @ 2000 rpm
Ford 292...	45-55 psi @ 2000 rpm
Ford 332, 352...	43-54 psi @ 2000 rpm
Plymouth 230...	40-45 psi @ 1500 rpm

Plymouth 318, 350...	50-65 psi @ 1500 rpm
Rambler 195...	50 psi @ 3000 rpm
Rambler 250, 327...	55 psi @ 3000 rpm
Studebaker 185...	20-40 psi @ 2000 rpm
Studebaker 259, 289...	40 psi @ 1400-1600 rpm

IGNITION

Cam Angle (Dwell)

All Chevrolet	30 deg
Dodge 230	36-42 deg
others	27-32 deg

Ford 223	35-38 deg
others	26-28 1/2 deg
Plymouth 318	27-32 deg
others	36-42 deg
Rambler 195	28-35 deg
others	28-32 deg
Studebaker 185...	38-40 deg
others...	28-34 deg

Breaker Point Gap

All Chevrolet engines .....	.016-.021 in.
Dodge 230 .....	.018-.022 in.
others .....	.015-.018 in.
Ford 223 .....	.024-.026 in.
others .....	.014-.016 in.
Plymouth 230 .....	.018-.022 in.
others .....	.015-.018 in.
All Ramblers .....	.016 in.
Studebaker 185...	.020 in.
others...	.013-.018 in.

Spark Occurs

(Degrees Before Top Center)

Engine

Chevrolet 235	TC
others	4 deg
Dodge 230	2 deg
others	6 deg
Ford 223	4 deg
others	3 deg
Plymouth 230	2 deg
Plymouth 318	10 deg
Plymouth 350	8 deg
Rambler 195 (American)	3 deg
others	5 deg
Studebaker 185	2 deg
others	4 deg

SPARK PLUGS

Make & Type

All Chevrolet engines	AC 44
Dodge 230	AL AR-51
325	AL AGR-42
350	AL AR-42
361	AL AR-32
Ford 223	CH 870
others	CH F-11-Y
Plymouth 230	AL AR-51
318	AL AR-42
350	AL AR-32
Rambler 195 (American)...	
AL AL-7, CH H-10, AC 45L	
Other Ramblers...	
AL AL-7J, C HH-10-64D	
Studebaker 185	CH J-7
AL AL-7J, CH H-10-64D	

Size

All Chevrolet	14 mm
All Dodge	14 mm

All Ford	18 mm
All Plymouth	14 mm
All Rambler	14 mm
All Studebaker	14 mm

Gap

All Chevrolet ....	.035 in.
All Dodge .....	.035 in.
All Ford .....	.032-.036 in.
All Plymouth ....	.035 in.
All Rambler .....	.033-.037 in.
Studebaker 185 ..	.028-.033 in.
others...	.033-.038 in.

Torque

Engine

Chevrolet 235.....	15-25 lb-ft
others.....	20-25 lb-ft
All Dodge	30-32 lb-ft
Ford 223.....	20-30 lb-ft
others.....	20 lb-ft
All Plymouth	30-32 lb-ft
All Rambler	30 lb-ft
All Studebaker	25-30 lb-ft

VALVES

Operating Tappet Clearance

(Hot unless noted)

All Chevrolet engines.	zero
Dodge 230...	
Inlet & Exhaust:	.010 in.
others.....	zero
Ford 223, 292...	
Inlet & Exhaust:	.019 in.
Ford 332, 352...	
Inlet & Exhaust:	.026 in.
Plymouth 230 ...	Inlet: .010 in.
	Exhaust: .010 in.
Plymouth 318 ...	Inlet: .012 in.
	Exhaust: .018 in.
Plymouth 350	zero
Rambler (American) Inlet:	.016
in. cold; Exhaust:	.018 in.
cold	
Rambler 195 ...	Inlet: .012 in.
	Exhaust: .016 in.
Rambler 250 ...	Inlet: .012 in.
	Exhaust: .014 in.
Rambler 327	zero
Studebaker 185...	
Inlet:	.016 in. cold
Exhaust:	.016 in. cold
Studebaker 259, 289...	
Inlet & Exhaust:	.023-.025 in.

Seat Angle

Engine

Chevrolet 235...	Inlet: 31 deg
	Exhaust: 46 deg
Chevrolet 283, 348...	Inlet: 45 deg
	Exhaust: 45 deg

All Dodge...	
Inlet & Exhaust:	45 deg
Ford 223, 292...	
Inlet & Exhaust:	45 $\frac{1}{2}$ -45 $\frac{3}{4}$ deg
Ford 332, 352...	
Inlet:	60 $\frac{1}{2}$ -60 $\frac{3}{4}$ deg
Exhaust:	45 $\frac{1}{2}$ -45 $\frac{3}{4}$ deg
All Plymouth...	
Inlet & Exhaust:	45 deg
Rambler 195...	
Inlet & Exhaust:	45 deg
Rambler 250, 327...	
Inlet:	30 deg
Exhaust:	45 deg
All Studebaker...	
Inlet & Exhaust:	45 deg

VALVE SPRINGS

Pressure

(At Open Length)

Engine

Chevrolet 235...	196-208 lb @ 1.462 in.
Chevrolet 283...	159-169 lb @ 1.306 in.
Chevrolet 348...	184-196 lb @ 1.230 in.
Dodge 230...	115 lb @ 1.38 in.
Dodge 325...	166 lb @ 1.31 in.
Dodge 350, 361...	180 lb @ 1.47 in.
Ford 223, 292...	161-177 lb @ 1.390 in.
Ford 332, 352...	180-198 lb @ 1.42 in.
Plymouth 230...	115 lb @ 1.38 in.
Plymouth 318...	166 lb @ 1.31 in.
Plymouth 350...	180 lb @ 1.41 in.
Rambler 195 (American)...	75-82 lb @ 1.44 in.
Rambler 195...	115-125 lb @ 1.4375 in.
Rambler 250, 327...	150-160 lb @ 1.4375 in.
Studebaker 185...	93-103 lb @ 1.3125 in.
Studebaker 259, 289...	105-115 lb @ 1.6719 in.

BATTERY

Amp-Hour Capacity

Engine

Chevrolet 348	63
Chevrolet 235, 283	53

Dodge 230, 325	50, 53
Dodge 350, 361	60
Ford 223, 292	55
Ford 332, 352	65
All Plymouth	50
Rambler 195	45
Rambler 250	50
Rambler 327	60
All Studebaker	50

Plates Per Cell

Engine

Chevrolet 348	11
Chevrolet 235, 283	9
Dodge 230, 325	9
Dodge 350, 361	11
Ford 223, 292	11
Ford 332, 352	13
All Plymouth	9
Rambler 195	7
Rambler 250	9
Rambler 327	11
All Studebaker	9

Terminal Grounded

All makes, all models....	Neg
---------------------------	-----

FRONT END

Toe-In

All Chevrolet ...	$\frac{1}{8}$ - $\frac{1}{4}$ in.
All Dodge	3/32-5/32 in.
All Ford	1/16- $\frac{1}{8}$ in.
All Plymouth ...	3/32-5/32 in.
All Rambler	1/16-3/16 in.
All Studebaker ..	1/16- $\frac{1}{8}$ in.

Camber

Chevrolet	0-+1 deg
Dodge ....Left:	0-+ $\frac{1}{2}$ deg
Right:	- $\frac{1}{4}$ -+ $\frac{1}{4}$ deg
Ford 223.....	0-+1 deg
others.....	0-+1 $\frac{1}{2}$ deg
Plymouth ...Left:	0- $\frac{1}{2}$ deg
Right:	- $\frac{1}{4}$ -+ $\frac{1}{4}$ deg
Rambler	
(American)	0-+ $\frac{1}{2}$ deg
others	- $\frac{1}{4}$ -+ $\frac{1}{4}$ deg
Studebaker 259..	-1-+1 deg
others..	0-+1 deg

Caster

Chevrolet	- $\frac{1}{2}$ -+ $\frac{1}{2}$ deg
Dodge	0-+1 deg
Ford	+ $\frac{1}{2}$ -+1 $\frac{1}{2}$ deg
Plymouth	0-+1 deg
Rambler	
(American)	- $\frac{1}{4}$ -+ $\frac{1}{4}$ deg
others	0-+ $\frac{1}{2}$ deg
Studebaker ...	-1-2 $\frac{1}{2}$ deg

(TURN TO NEXT PAGE, PLEASE)

FLEET CAR DATA



**CHEVROLET
PLYMOUTH
FORD**

**DODGE
RAMBLER
STUDEBAKER**

Continued from Page 175

King Pin Slant

Chevrolet	7¾ deg
Dodge	6½ deg
Ford	7 deg
Plymouth	6½ deg
Rambler (American)	8 deg
others	6¼ deg
Studebaker	6 deg

CAPACITIES

Crankcase

Chevrolet 235	5 qt
others	4 qt
Dodge 230, 325	5 qt
others	4 qt
Ford 223	4 qt
others	5 qt
Plymouth 350	4 qt
others	5 qt
All Rambler	4 qt
All Studebaker	5 qt

Transmission

All Chevrolet	2 pt
Dodge 361	21 pt
others	2¾ pt
All Ford	3 pt
Plymouth 350	21 pt
others	2¾ pt
Rambler 195	1½ pt
Rambler 250	2¼ pt
Rambler 327	4 pt
Studebaker 185	2¼ pt
others	3¾ pt

Rear Axle

All Chevrolet	4 pt
Dodge 230	3¼ pt
others	3½ pt
All Ford	5½ pt
Plymouth 230	3¼ pt
others	3½ pt
Rambler 195	3 pt
others	4 pt
Studebaker 185	2½ pt
others	3 pt

Cooling System

(Without heater)

Chevrolet 348	22 qt
others	16 qt
Dodge 230	13 qt
Dodge 325	20 qt
Dodge 350, 361	16 qt
Ford 223	15 qt
others	19 qt
Plymouth 230	13 qt
Plymouth 318	20 qt
Plymouth 350	16 qt
Rambler (American)	11 qt
Rambler 195	10 qt
Rambler 250	20 qt
Rambler 327	19 qt
Studebaker 185	11 qt
others	17 qt

LUBRICATION

Crankcase

Chevrolet—Model 235: Above 32 deg use SAE 20W, 20, or 10W-30; Between 0 and 32 deg use SAE 10W or 10W-30; Below 0 deg use SAE 5W or 5W-20.
Others: Above 90 deg use SAE 30; Between 32 and 90 deg use SAE 20W, 20 or 10W-30; Between 0 and 32 deg use SAE 10W or 10W-30; Below 0 deg use SAE 5W or 5W-20.

Dodge—All models: Above 32 deg use SAE 30, 20W-40, or 10W-30; Between 10 and 32 deg use SAE 20W, 20W-40, or 10W-30; Between -10 and 10 deg use SAE 10W, 10W-30, or 5W-20; Below -10 deg use SAE 5W, or 5W-20.

Ford—All models: Above 32 deg use SAE 20, or 20W; Between -10 and 32 deg use SAE 10, or 10W; Below -10 deg use SAE 5W.

Plymouth—All models: Above 32 deg use SAE 30, 20W-40, or 10W-30; Between 10 and 32 deg use SAE 20W, 20W-40, or

10W-30; Between -10 and 10 deg use SAE 10W, 10W-30, or 5W-20; Below -10 deg use SAE 5W, or 5W-20.

Rambler—All models: Above 32 deg use SAE 20; Between 10 and 32 deg use SAE 20, or 10W-30; Between -10 and 10 deg use SAE 10W; Below -10 deg use SAE 5W, or 5W-20.

Studebaker—All models: Above 32 deg use SAE 30, 20W-40, or 10W-30; Between 10 and 32 deg use SAE 20W, or 10W-30; Between -10 and 10 deg use SAE 10W, or 10W-30; Below -10 deg use SAE 5W, or 5W-20.

Transmission

Chevrolet—All models: Use SAE 90 all year. In extreme cold use SAE 80.

Dodge—Automatic: Use Type A automatic transmission fluid all year. Manual: Above -10 deg use SAE 80; Below -10 deg use SAE 75.

Ford—All models: Use SAE 80 all year.

Plymouth—All models: Use SAE 80 all year. In extreme cold use SAE 75.

Rambler—All models: Above 32 deg use SAE 90; Below 32 deg use SAE 80.

Studebaker—All models: Use SAE 90 all year.

Rear Axle

Chevrolet—All models: Use SAE 90 all year.

Dodge—All models: Above -10 deg use SAE 90; Between -10 and -30 deg use SAE 80; Below -30 deg use SAE 75.

Ford—All models: Use SAE 90 all year. In extreme cold use SAE 80.

Plymouth—All models: Above -10 deg use SAE 90; Between -10 and 30 deg use SAE 75.

Rambler—All models: Use SAE 90 all year. In extreme cold use SAE 80.

Studebaker—All models: Use SAE 90 all year.

SECTION STATISTICS

2

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TRUCKS IN USE BY MAKE AND BY MODEL YEAR

Two-Thirds Are Five or More Years Old

Model Year	Auto-car	Brook-way	Chevrolet	Diamond T	Divco	Dodge, Plymouth	Federal	Ford	G.M.C.	International	Mack	Pontiac	Reo	Studebaker	White-Sterling	Willys	All Others	Total
1957		438	153,924	2,081	1,507	28,545	23	105,101	32,724	46,694	6,405		1,570	4,179	6,395	9,090	7,464	406,138
1956		1,012	216,777	3,668	3,171	55,631	43	323,914	83,153	96,828	12,111		2,675	7,626	13,464	9,991	10,794	540,858
1955		1,116	371,013	3,203	3,226	61,550	46	256,621	87,019	97,310	9,893		2,542	12,713	11,992	10,467	8,537	918,848
1954	1,073	1,478	248,050	2,430	2,609	53,270	246	200,896	89,184	77,896	5,989	398	2,032	5,370	9,554	7,752	5,513	675,750
1953	1,443	1,796	276,444	2,838	2,702	80,020	526	232,588	82,745	76,501	5,438	794	2,917	24,429	9,621	13,446	5,432	619,688
1952	1,194	1,397	242,985	2,680	2,791	81,010	563	178,105	68,362	90,427	5,659	614	2,481	25,651	8,914	10,578	5,530	738,951
1951	1,671	1,878	335,258	3,462	3,978	81,089	677	229,442	79,734	86,902	7,051	1,129	2,405	29,943	9,855	19,012	6,320	899,406
1950	1,446	1,790	352,732	3,665	4,348	95,745	702	272,426	89,719	74,079	6,523	1,348	2,178	31,919	9,220	15,611	5,620	969,071
1949	1,448	1,935	267,306	3,087	3,370	82,860	572	167,108	58,297	78,164	4,304	1,098	2,264	59,383	5,172	17,452	4,974	787,591
1948	1,677	1,679	238,582	6,956	6,113	85,269	1,466	174,316	94,852	86,673	5,712		8,766	17,705	6,809	33,049	6,130	727,784
1947	2,483	2,050	143,114	4,991	4,749	74,591	1,878	115,743	29,427	75,407	7,114		4,000	24,204	7,138	14,288	7,163	516,350
1946	2,273	1,677	166,458	1,968	3,237	63,611	1,120	102,083	13,884	49,312	2,217		3,188	14,132	4,561	11,311	5,372	446,414
1945	1,120	784	17,389	1,157	1,159	10,134	501	22,090	5,552	14,561	2,246		1,038	1,446	2,656	1,402	2,090	85,327
1944	506	351	6,959	446	183	3,057	259	7,096	2,419	6,666	995		224	656	1,139	640	939	33,135
1943	117	30	1,621	115	74	1,186	149	4,288	1,281	2,044	190		92	240	423	810	451	13,111
1942	547	86	40,141	469	427	14,660	214	27,774	9,133	11,700	808		468	834	1,073	2,062	1,388	111,786
1941	767	414	78,400	1,206	1,357	28,526	169	53,809	13,437	27,056	2,558		322	1,908	1,805	797	2,338	213,679
1940	373	204	51,024	810	782	17,567	116	36,095	5,176	15,570	1,502		73	378	656	604	1,748	135,968
1939	323	157	33,023	639	580	13,820	94	23,701	5,384	10,485	1,051		80	431	418	192	1,153	91,321
Earlier	732	370	84,546	2,420	481	30,410	389	112,829	10,125	24,731	2,608		1,194	1,173	1,955	564	7,163	281,689
Unid.*	529	88	10,942	290	100	2,915	69	7,810	2,753	3,503	398	1,982	193	809	624	800	29,281	63,098
Totals	19,429	19,830	3,353,509	47,681	45,924	985,466	9,842	2,652,443	766,160	1,053,309	91,379	7,363	37,722	265,129	113,446	179,918	125,400	9,775,950

*—Unidentified as to model year.

Based on Data from The Reuben H. Donnelley Corp.

NUMBER AND PER CENT OF TRUCKS IN USE BY AGE GROUPS

Average Age Is 6.97 Years

Age in Years	1957			1956			1955			1954		
	Units	% of Total	Cumul.	Units	% of Total	Cumul.	Units	% of Total	Cumul.	Units	% of Total	Cumul.
Under 1	406,138	4.18	4.18	488,692	5.14	5.14	501,841	5.51	5.51	408,880	4.67	4.67
1-2	840,858	8.66	12.84	923,404	9.71	14.85	689,919	7.57	13.08	842,041	9.61	14.28
2-3	918,848	9.46	22.30	688,828	7.24	22.09	846,981	9.30	22.38	786,008	8.97	23.25
3-4	675,750	6.96	29.26	943,657	8.87	30.96	776,276	8.52	30.90	1,055,119	12.04	36.32
4-5	819,660	8.44	37.70	763,474	8.03	38.99	953,787	10.47	41.37	1,055,119	12.04	48.36
5-6	738,951	7.61	45.31	832,160	8.81	47.80	1,036,818	11.38	52.75	880,347	10.04	58.40
6-7	899,406	9.26	54.57	1,011,260	10.64	58.44	882,071	9.46	62.21	866,072	9.88	68.28
7-8	969,071	9.98	64.55	831,542	8.75	67.19	831,940	9.13	71.34	664,221	7.58	75.82
8-9	787,591	8.11	72.66	789,457	8.30	76.49	624,674	6.86	78.20	594,195	6.78	82.60
9-10	727,784	7.48	80.14	576,708	6.07	82.56	551,858	6.06	84.26	114,918	1.31	85.91
10-11	516,350	5.32	85.46	501,353	5.27	87.83	107,019	1.17	85.43	46,618	.53	86.44
11-12	446,414	4.60	90.06	95,535	1.02	88.85	42,615	.47	85.90	17,074	.19	87.63
12-13	88,327	.91	90.94	38,548	.41	89.26	14,821	.16	86.06	168,582	1.92	89.55
13-14	33,135	.34	91.28	14,041	.15	89.41	148,315	1.63	87.69	349,884	3.99	93.54
14-15	13,111	.13	91.41	130,361	1.37	90.78	304,021	3.34	91.03	238,384	2.72	96.26
15-16	111,786	1.15	92.56	253,298	2.66	93.44	202,159	2.22	93.25	168,497	1.92	98.18
16-17	213,679	2.20	94.76	164,096	1.73	95.17	141,254	1.55	94.80	108,335	1.24	99.42
17-18	135,968	1.40	96.16	111,856	1.18	96.35	88,925	.97	95.77	154,414	1.76	98.18
18-19	91,321	.94	97.10	69,447	.73	97.08	125,032	1.37	97.14	116,249	1.33	99.51
19 and older	281,689	2.90	100.00	278,134	2.92	100.00	260,754	2.86	100.00	218,076	2.49	100.00
Total	9,912,864	100.00	100.00	9,507,941	100.00	100.00	9,111,280	100.00	100.00	8,764,408	100.00	100.00
Age not known	63,086			36,141			51,164			36,000		
Total in use	9,775,950			9,544,082			9,162,444			8,800,408		
Average age of known models	6.97 yrs.			6.74 yrs.			6.71 yrs.			6.58 yrs.		

Based on data from The Reuben H. Donnelley Corp. as of July 1 of each year.

How Much Fuel Is Used Per Mile?

Bureau of Public Roads studied 1954 data, latest available, and came up with this chart showing amount of fuel

used by various classes of users—and how much fuel was used per mile. Chart comes from the February, 1958, issue of BPR's magazine, Public Roads.

Vehicle type	Average operating gross weight		Distribution of travel by type of fuel used			Rate of fuel consumption, by type of fuel used						
	Amount	Index	Gasoline	Diesel	Other	Per mile			Per ton-mile			
						Gasoline	Diesel	Other	Gasoline		Diesel	
									Amount	Index	Amount	Index
Passenger cars.....	Pounds 4,025	1.00	Percent 100.0	Percent ()	Percent ()	Gallons 0.067			Gallons 0.034	1.000		
School and miscellaneous buses.....	11,600	2.88	100.0	()	()	.125			.022	.647		
Commercial buses:												
Inter-city.....	23,000	5.71	38.9	61.1	()	.185	0.135		.016	.471	0.012	0.353
Transit.....	23,000	5.71	60.2	35.4	4.4	.307	.228	0.364	.027	.794	.020	.588
Single-unit trucks:												
2-axle, 4-tire.....	4,764	1.84	100.0	()	()	.074			.031	.912		
2-axle, 6-tire.....	11,290	2.96	100.0	()	()	.127			.021	.618		
3-axle.....	24,182	5.99	100.0	()	()	.192			.016	.471		
Vehicle combinations:												
Tractor-semitrailer.....	35,690	8.87	79.9	17.9	2.2	.241	.168	.268	.013	.382	.009	.265
Truck-trailer.....	46,799	11.63	79.9	17.9	2.2	.282	.197	.313	.012	.353	.008	.235

1 Percentage negligible.

54 YEARS OF TRUCK & BUS FACTORY SALES

30 Million Vehicles,
\$38 Billion Value

Year	Units	Wholesale Value	Average Wholesale Price
1904	700	\$1,272,747	\$1,818
1905	750	1,330,000	1,773
1906	800	1,440,000	1,800
1907	1,000	1,780,000	1,780
1908	1,500	2,550,000	1,700
1909	3,297	5,333,663	1,618
1910	6,000	9,660,000	1,610
1911	10,681	21,000,000	1,966
1912	22,000	43,000,000	1,954
1913	23,500	44,000,000	1,872
1914	24,900	44,219,096	1,776
1915	74,000	125,800,000	1,700
1916	82,130	161,000,000	1,747
1917	126,157	220,982,668	1,724
1918	227,250	434,168,992	1,910
1919	224,731	371,422,820	1,653
1920	321,789	423,249,410	1,315
1921	148,052	166,070,810	1,122
1922	269,991	226,049,658	837
1923	409,295	308,537,929	754
1924	416,659	318,580,580	765
1925	530,659	458,400,277	864
1926	516,947	452,123,435	875
1927	464,793	420,130,624	904
1928	563,342	460,108,903	789
1929	881,909	622,533,897	706
1930	575,364	390,752,061	679
1931	432,262	265,444,618	614
1932	228,303	137,624,157	603
1933	329,218	178,390,863	533
1934	576,205	326,781,688	567
1935	697,367	380,987,330	546
1936	782,220	463,719,466	593
1937	891,016	537,314,633	603
1938	485,841	329,917,646	675
1939	700,377	489,766,701	699
1940	754,901	567,620,144	752
1941	1,060,820	1,069,799,855	1,008
1942	818,662	1,427,456,801	1,744
1943	699,689	1,451,794,475	2,076
1944	737,524	1,700,926,939	2,306
1945	695,683	1,181,955,532	1,803
1946	940,866	1,043,247,276	1,109
1947	1,239,443	1,731,713,000	1,397
1948	1,376,274	1,880,475,000	1,366
1949	1,134,185	1,394,035,000	1,229
1950	1,337,193	1,707,748,000	1,277
1951	1,426,828	2,323,859,000	1,629
1952	1,218,169	2,319,789,000	1,904
1953	1,206,266	2,089,060,000	1,732
1954	1,042,174	1,660,019,000	1,593
1955	1,249,106	2,020,973,000	1,618
1956	1,104,481	2,077,432,000	1,881
1957	1,103,343	2,061,065,000	1,867
54 Years	30,196,608	\$38,572,375,734	\$1,277

INDEXES OF INTERCITY TRUCK TONNAGE

U. S. Total Is Up Two Points for a New High

	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
United States	103	107	137	148	148	160	154	177	182	184

BY REGIONS

All But Three Show Gains

	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
New England	102	99	122	126	128	136	134	140	153	155
Middle Atlantic	104	106	133	142	141	150	141	165	171	174
Central	104	107	149	154	149	167	148	177	173	164
Southern	94	114	134	158	172	185	192	224	229	243
Northwestern	104	106	123	134	133	143	147	163	173	182
Midwestern	103	113	133	141	141	151	150	171	172	172
Southwestern	103	110	139	164	168	177	184	220	234	266
Rocky Mountain	102	110	129	152	176	200	214	230	246	271
Pacific	101	103	119	141	147	148	151	166	182	181

BY COMMODITIES

Specialized Carriers Increase Most

	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
General Freight	103	106	146	156	156	168	160	182	187	187
Household Goods	102	102	117	146	167	175	178	199	216	235
Heavy Machinery	106	86	108	134	153	174	164	205	212	219
Liquid Petroleum Products	104	107	123	139	143	151	156	171	181	189
Refrigerated Liquids	101	103	129	121	129	130	140	162	148	169
Refrigerated Solids	97	124	149	165	185	186	193	211	244	270
Agricultural Commodities	108	91	105	123	116	111	112	122	151	149
Motor Vehicles	97	124	159	146	134	161	137	196	156	176
Building Materials	86	141	152	214	241	220	213	252	290	225
Film & Associated Commodities	103	106	114	114	126	113	109	115	120	*
All Other Commodities	103	110	143	164	159	175	149	172	180	180

Compiled by American Trucking Assns. from reports of ICC Class 1 Common and Contract Intercity Carriers of Property. Indexes are based on 1947-49 average = 100. *—Included with "All Other Commodities."

Fuel Use Is Over 43 Billion Gallons

Here's the answer to what size vehicle uses what kind of fuel. It was prepared by Bureau of Public Roads from latest available data (1954). Chart comes from the February, 1958, issue of BPR's magazine, Public Roads.

Vehicle type	Total miles traveled	Gasoline-powered vehicles		Diesel-powered vehicles		Vehicles powered by other fuels		Total fuel consumed		Total tax payments
		Mileage	Fuel consumed	Mileage	Fuel consumed	Mileage	Fuel consumed	Gallons	Distribution	
Passenger cars	448,913	448,913	30,286					30,286	Percent 69.303	Million dollars 1,602.6
School and miscellaneous buses	343	343	43					43	.099	2.3
Commercial buses:										
Inter-city	1,206	469	87	737	100			187	.429	9.9
Transit	1,990	1,196	367	796	161	88	32	560	1.285	29.6
All commercial buses	3,196	1,665	454	1,443	261	88	32	747	1.714	39.5
All buses	3,539	2,008	497	1,443	261	88	32	790	1.813	41.8
Single-unit trucks:										
2-axle, 4-tire	52,742	52,742	3,913					3,913	8.979	207.0
2-axle, 6-tire	25,998	25,998	3,303					3,303	7.590	174.8
3-axle	2,770	2,770	531					531	1.218	28.1
All single-unit trucks	81,510	81,510	7,747					7,747	17.777	409.9
Vehicle combinations:										
Tractor-semitrailer	17,929	14,325	3,450	3,209	541	395	106	4,097	9.402	216.6
Truck-trailer	2,100	1,678	473	376	74	46	14	561	1.287	29.7
All combinations	20,029	16,003	3,923	3,585	615	441	120	4,658	10.689	246.5
All trucks and combinations	101,539	97,513	11,670	3,585	615	441	120	12,405	28.466	656.4
All vehicles	553,991	548,434	42,455	5,028	876	529	152	43,483	99.782	2,306.8
Fuel consumed by motorcycles, etc.								95	.218	5.0
Total fuel consumed and tax payments								43,578	100.000	2,303.8

FACTORY SALES, SPECIAL TYPES OF VEHICLES

Almost a Million Station Wagons

Type of Vehicle	1957	1956	1955	1954	1953	1952	1951	1950
Station Wagons ¹	919,317	650,696	780,151	364,234	319,178	189,651	195,740	159,944
Motor Coaches ²	3,833	4,064	4,023	4,118	4,057	5,375	9,460	4,908
School Bus Chassis	23,466	22,714	26,536	22,466	21,284	19,462	31,891	19,953
Trucks with Cab-over-Engine	53,053	44,812	45,818	26,260	24,712	19,592	25,482	22,370
Trucks with Diesel Engines	24,456	25,797	19,876	10,546	10,872	13,165	16,494	13,903
Trucks with 6 wheels, 3 axles	25,694	33,920	29,060	16,364	14,864	15,585	15,719	15,719
Multistop Trucks	24,282	26,736	23,653	19,507	19,246	18,493	28,867	21,681
Ambulances and Funeral Vehicles	2,917	2,281	2,661	2,980	3,034	2,662	4,177	2,971

Source: Automobile Manufacturers Assn. ¹—Includes station wagons built on both passenger car and truck chassis. ²—Including integral school buses.

NEW TRUCK REGISTRATIONS BY MAKE & GVW

Over Half Were Under 6000 lb

	Year	5,000 lb. and Less	6,001-10,000	10,001-14,000	14,001-18,000	18,001-22,000	22,001-26,000	26,001-30,000	30,001-33,000	33,001-35,000	Tota
BROCKWAY	1957					6	64	270	398		738
	1956					118	130	636			884
	1955					189	228	727			1,144
	1954										
CHEVROLET	1957	174,074	46,956	10,904	52,391	6,633					290,960
	1956	178,100	47,964	11,348	60,021	4,712					302,145
	1955	169,808	53,904	12,619	73,484						329,791
	1954										
DIAMOND T	1957				1	182	1,340	1,579	370		3,472
	1956				103	344	1,109	2,421			4,037
	1955				498	599	823	1,777			3,697
	1954										
DIVCO	1957	7	1,752	724		75					2,558
	1956		2,321	791							3,112
	1955		2,415	883							3,298
	1954										
DODGE	1957	23,386	11,168	469	3,510	6,242	3,981	507	156		49,431
	1956	22,872	17,633	2,634	7,968	3,755	2,125	684			57,651
	1955	22,009	24,055	1,065	9,903	6,833	1,210	333			66,208
	1954										
FORD	1957	163,798	40,137	9,485	45,194	9,136	5,646	1,964	2,021		277,301
	1956	129,137	42,229	12,788	54,186	10,389	9,210	5,814			263,753
	1955	157,599	47,811	12,661	52,331	13,423	8,004	3,911			295,900
	1954										
F.W.D.	1957				22	35	83	192	101		433
	1956				21	26	171	263			481
	1955				11	23	196	85			315
	1954										
G.M.C.	1957	21,966	9,325	2,426	6,690	9,313	7,375	4,165	905		62,165
	1956	26,813	11,612	3,033	10,920	10,156	10,738	6,964			82,266
	1955	33,425	13,401	3,798	11,122	9,669	8,109	5,393			84,877
	1954										
INTERNATIONAL	1957	27,721	14,270	3,753	4,954	16,270	13,971	10,248	5,769		96,956
	1956	20,696	23,830	4,957	7,514	16,129	15,733	17,155			106,014
	1955	29,466	15,315	3,351	16,825	14,663	8,928	11,893			100,441
	1954										
KENWORTH	1957							119	887		1,006
	1956							1,239			1,239
	1955							1,182			1,182
	1954										
MACK	1957					134	1,146	4,920	7,112		13,312
	1956					177	1,669	11,144			13,190
	1955					199	1,967	8,746			10,932
	1954										
PETERBILT	1957							194	303		497
	1956							609			609
	1955							424			424
	1954										
REO	1957				66	141	543	768	549		2,067
	1956				211	383	735	1,635			2,974
	1955				348	605	1,018	1,148			3,121
	1954										
STUDEBAKER	1957	4,277	1,174	237	398	459	2				6,547
	1956	5,771	1,478	319	1,142						8,708
	1955	6,648	1,972	625	1,572						10,817
	1954										
WHITE	1957					295	685	8,095	2,816		12,491
	1956					350	1,053	13,734			15,137
	1955					617	1,908	11,847			14,372
	1954										
WILLYS JEEP	1957	6,678									6,678
	1956	9,131									9,131
	1955	10,441									10,441
	1954										
WILLYS TRUCK	1957	14,247	1,080								15,327
	1956	7,490	8,867								16,357
	1955	6,012	8,789								14,801
	1954										
ALL OTHERS	1957	15,262				13	181	334	356		16,146
	1956	5,463		4		4	239	968			5,460
	1955	2,227	1	9	2	16	187	788			1,003
	1954										
TOTAL	1957	451,328	125,856	26,028	113,226	48,934	35,017	33,955	21,743		858,065
	1956	407,743	153,932	35,874	142,094	48,555	43,172	63,266			894,366
	1955	459,595	167,673	35,967	166,077	48,836	32,588	48,265			967,001
	1954	481,088	151,760	35,432	149,919	32,376	29,081	29,435			829,101
% OF TOTAL	1957	52.60%	14.67%	3.27%	13.19%	5.70%	4.08%	3.96%	2.53%		100.00%
	1956	45.58%	17.21%	4.01%	15.89%	5.43%	4.83%	7.07%			100.00%
	1955	48.02%	17.52%	3.76%	17.38%	5.09%	3.41%	5.00%			100.00%
	1954	48.38%	18.30%	4.27%	18.08%	3.91%	3.51%	3.58%			100.00%
	1957	49.55%	18.57%	4.87%	16.20%	3.96%	3.90%	2.95%			100.00%

* Included with 26,001 and over prior to 1957.

Based on data from R. L. Polk & Co.

NEW TRUCK REGISTRATIONS

858,085 New Entries in 1957

Year	Units
1933	245,888
1934	402,888
1935	510,663
1936	611,644
1937	618,249
1938	365,349
1939	486,748
1940	559,150
1941	640,697
1942	77,422
1943	62,469
1944	121,269
1945	350,932
1946	625,249
1947	879,132
1948	1,035,174
1949	961,961
1950	1,142,307
1951	1,003,850
1952	812,099
1953	930,312
1954	829,101
1955	957,001
1956	849,366
1957	858,085

Source: 1927 through March, 1942, and 1946 and later years compiled by R. L. Polk & Co. April, 1942 through July, 1946 data are W.P.B. and O.D.T. and represent certificates of transfer to civilian users.

NEW TRUCK REGISTRATIONS BY MAKES

Here's the Record for '57

	1957	1956	1955	1954	1953	1952	1951
Autocar	1	1	1	1,041	1,713	1,595	2,112
Brockway	738	884	1,144	1,340	2,080	1,752	2,182
Chevrolet	290,980	302,145	329,791	293,079	327,960	272,269	350,344
Diamond T	3,472	4,037	3,697	2,701	3,396	3,420	4,508
Divco	2,558	3,112	3,298	2,506	2,589	2,752	3,752
Dodge	49,431	57,651	66,208	60,658	82,345	102,129	108,600
Federal	1	1	56	248	898	841	1,008
Ford	277,301	283,753	295,900	267,799	266,027	179,523	250,802
F. W. D.	433	461	315	393	359	543	501
G. M. C.	62,165	62,296	84,677	66,644	82,296	79,612	100,286
International	96,956	108,014	100,441	84,222	95,404	92,788	95,184
Kenworth	1,006	1,239	1,182	697	747	705	668
Mack	13,312	13,190	18,932	6,996	6,890	7,138	9,794
Peterbilt	497	609	424	344	332	236	1
Pontiac	1	1	1	1	468	541	908
Reo	2,067	2,974	3,121	2,283	3,496	3,383	3,427
Studebaker	6,547	8,708	10,817	10,193	22,473	28,965	32,675
White	12,491	15,137	14,372	10,340	12,261	16,856	12,260
White—Sterling	1	1	1	1	1	250	334
Willis—Jeep	6,678	9,131	10,441	7,998	9,247	8,591	9,002
Willis—Truck	15,327	14,357	16,811	9,925	6,465	11,782	15,290
All Others	16,146	6,678	3,174	993	794	2,433	2,214
Total	858,085	894,366	957,001	829,101	930,312	812,099	1,003,850

—Included with "All Others."

—Included with White.

Source: R. L. Polk & Co.

1957 NEW TRUCK REGISTRATIONS BY MAKES, BY STATES

California, Texas and New York Added Most

State	Brockway	Chevrolet	Diamond T	Divco	Dodge	Ford	FWD	GMC	International	Kenworth	Mack	Peterbilt	Reo	Studebaker	White	Willis Jeep	Willis Truck	All Others	Total
Alabama	1	6,761	45	38	656	5,283		1,836	1,683	1	486		27	29	274	44	73	134	17,368
Arizona		3,371	10	13	604	3,180	9	961	810	41	37	2	11	75	61	70	188	237	9,680
Arkansas		5,233	31		610	4,931		1,261	1,502	101				106	47	44	54	30	13,950
California	1	32,622	251	97	5,660	33,112	70	5,821	6,195	343	306	327	163	645	629	637	1,185	3,926	91,990
Colorado		3,881	25	40	682	4,009	11	1,082	1,370	51	125	17	30	89	93	282	524	84	12,395
Connecticut	20	2,069	67	97	576	2,150	3	501	1,118	1	245		44	57	239	102	235	276	7,800
Delaware	7	869	69	4	186	601		211	376		84		5	15	81	22	24	36	2,590
Dist. of Columbia		878	3	36	97	654	1	194	266		48		14	3	24	8	50	52	2,328
Florida	1	9,069	121	166	1,197	9,256	15	1,789	2,320	8	632		124	190	420	344	759	918	27,329
Georgia		7,851	85	19	823	7,693		1,803	2,192	9	335		32	120	306	89	122	185	21,664
Idaho		2,006	2		486	1,783		613	868	3	119	5	3	126	21	72	324	91	6,424
Illinois		11,262	405	116	1,888	11,317	42	2,408	5,391	2	515		75	313	491	163	462	590	38,460
Indiana	1	7,231	164	88	1,399	7,639	10	1,518	3,550	97	349		101	426	623	61	216	262	23,755
Iowa		4,514	125	26	704	4,717	7	802	2,496	7	96	3	19	97	125	24	107	191	14,080
Kansas		4,792	53	5	532	4,891	2	663	1,559	4	47		22	119	131	46	173	80	13,319
Kentucky		5,559	30	13	717	4,827	4	1,373	1,560		131		23	88	125	117	196	81	14,844
Louisiana		8,793	56		839	7,458	7	1,296	1,872	2	222		43	93	136	112	121	182	21,234
Maine	8	1,400	6	32	295	1,433	2	440	908		98		2	60	43	135	263	85	5,230
Maryland	35	3,605	23	29	872	3,193	2	641	1,217		265		66	63	203	45	133	156	16,548
Massachusetts	43	3,019	66		109	822	3	967	1,645		279		34	57	392	161	467	382	12,818
Michigan		10,038	228	158	2,559	11,305	13	2,296	2,296		290		128	167	308	207	514	540	31,650
Minnesota		4,980	69	34	899	6,017	10	989	2,425	12	137	1	26	209	110	57	219	208	16,393
Mississippi		5,687	9		480	4,684	2	1,098	1,626		94		1	106	21	66	79	66	14,019
Missouri		8,412	64	40	814	6,680	5	1,894	2,529	3	162		28	153	381	84	110	198	21,557
Montana		2,118	12		418	1,895	3	538	1,243	19	72	2		106	44	117	440	135	7,162
Nebraska		2,904	97	21	386	2,670	9	644	1,552	24	112	36	5	59	129	75	134	37	9,093
Nevada		1,166	5	1	131	967		211	196	8		8		66	1	34	94	142	3,044
New Hampshire	4	929	6	13	219	841	2	292	472		100			6	38	33	72	216	3,372
New Jersey	141	6,716	147	172	1,812	6,028	17	1,861	2,275	2	787		56	97	605	145	383	669	21,923
New Mexico		4,213	14	2	445	2,811	3	988	913	22	147	1	23	72	92	115	170	59	10,088
New York	320	12,338	212	365	4,232	12,139	32	3,371	6,407	5	1,256		341	294	1,122	563	1,486	1,746	46,229
North Carolina		8,204	88	29	951	6,531	2	1,728	1,913		730		18	134	332	102	161	144	21,065
North Dakota		1,475	1		5	296	1	320	1,187		5			4	5	16	45	27	5,182
Ohio	2	10,367	212	277	2,587	12,377	42	2,428	4,612		753		183	279	893	307	628	586	58,626
Oklahoma		6,913	17	9	625	6,176	17	1,307	1,886	12	112		86	42	96	197	56	130	17,698
Oregon		4,106	29	21	726	3,745	1	1,079	1,578	79	186	51	39	196	254	145	541	705	13,461
Pennsylvania	147	11,014	186	175	3,525	11,542	12	2,769	5,602	1	1,577		116	425	925	465	1,201	654	40,336
Rhode Island	1	1,210	17	22	324	773		179	336		92		18	3	75	30	31	92	3,203
South Carolina		3,567	2	3	393	3,108		591	722	1	157	1	1	40	92	34	72	97	8,861
South Dakota		1,372	11	4	277	1,505	8	378	1,232	7	22		5	44	8	68	152	37	5,127
Tennessee		5,796	44	15	758	5,102		1,321	1,723	2	311		7	70	414	49	113	101	15,626
Texas		28,626	177	28	2,536	25,176	19	4,046	6,872	92	857	4	51	342	1,202	389	464	294	72,392
Utah		1,703	27	6	390	1,603	3	467	732	30	47	32	15	48	48	45	174	116	5,496
Vermont		800	8	7	155	762		263	426		33		2	39	4	146	230	81	2,960
Virginia	2	6,426	16	24	1,317	5,620	4	1,187	1,872		402		35	182	296	150	349	215	16,101
Washington		4,679	74	65	944	4,123	4	1,207	1,503	109	166	7	23	150	114	112	331	471	14,082
West Virginia		2,941	20	26	636	2,743	3	881	943		68		24	120	110	233	378	97	9,224
Wisconsin		4,878	31	111	746	5,073	35	1,009	2,639		156		31	139	173	94	288	371	15,777
Wyoming		1,294	12		231	1,228		432	644	8	49		4	52	37	82	303	38	4,414
Total	738	290,980	3,472	2,558	49,431	277,301	433	62,165	96,956	1,006	13,312	497	2,067	6,547	12,491	6,678	15,327	16,146	858,085

Based on data from R. L. Polk & Co.



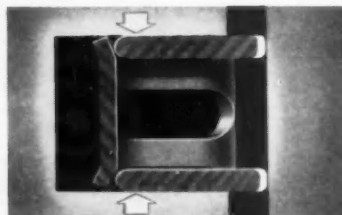
Even under high vacuum conditions

AMERICAN HAMMERED'S new Stainless Steel Oil Ring is positively side-sealing!

Modern, high compression engines create terrific side-sealing problems for piston rings. Under deceleration, for example, these engines suck oil around the side rails of ordinary oil rings. But American Hammered's new stainless steel oil ring (U.S. Pat. No. 2,789,872) is positively side-sealing. It controls oil regardless of cylinder or operating conditions.

This stainless steel oil ring holds its original, built-in tension at engine operating temperature . . . needs no groove backing to maintain tension. The ring resists sludging and clogging because it's stainless steel. And stainless steel will outlive carbon steel two to one.

Note arrows. Axial pressure of the stainless steel expander at these points makes a fast seal—oil cannot be drawn around side rails, even under high vacuum.



This oil ring is matched with American Hammered's pre-seated (factory-applied lapping process equal to hundreds of miles of engine operation) top groove compression ring for maximum oil control, minimum wear. Your rigs are on the road longer when you install Krome-Oil.

New Stainless Steel Oil Ring available in Krome-Oil Ring Sets—where required by engine conditions



AMERICAN HAMMERED

AUTOMOTIVE REPLACEMENT DIVISION • 2001 Sanford St., Muskegon, Mich.
Manufacturers of American Hammered Automotive Replacement Piston Rings
A Division of Sealed Power Corporation

TRUCK FACTS

TOTAL TRUCK REGISTRATIONS BY STATES

California Holds Top Spot

	1957	1956	1955	1954	1953	1952
Alabama	186,769	191,754	185,067	166,453	170,753	164,490
Arizona	99,037	90,000	85,788	82,871	78,687	72,086
Arkansas	182,402	181,574	177,627	171,393	167,627	160,163
California	640,202	808,720	744,020	672,943	640,679	700,129
Colorado	177,948	166,745	163,266	152,250	145,352	138,333
Connecticut	110,203	102,404	104,058	103,278	94,112	93,754
Delaware	35,424	33,219	29,211	25,962	23,919	21,541
District of Columbia	17,750	19,400	19,387	18,005	18,478	20,073
Florida	280,978	252,763	231,807	213,147	205,068	194,223
Georgia	247,685	240,544	236,753	226,415	215,341	213,746
Idaho	86,000	84,307	87,471	84,627	70,161	69,313
Illinois	434,755	412,000	378,240	389,606	363,963	379,604
Indiana	320,000	399,434	304,457	283,505	270,182	253,362
Iowa	218,100	214,580	211,768	205,075	200,145	192,904
Kansas	412,630	262,952	251,188	241,657	231,590	224,348
Kentucky	209,800	209,800	209,800	195,176	188,687	181,708
Louisiana	205,217	196,573	194,964	186,452	178,469	166,205
Maine	70,243	71,440	74,396	71,878	71,775	64,437
Maryland	135,476	133,884	129,220	142,786	103,792	111,727
Massachusetts	180,166	179,294	174,166	174,738	168,595	169,786
Michigan	381,414	380,773	372,646	362,218	340,618	315,738
Minnesota	241,170	237,307	229,691	221,333	215,430	205,601
Mississippi	171,486	174,544	169,223	166,723	171,792	163,332
Missouri	294,907	304,430	301,306	281,136	272,746	274,433
Montana	101,177	100,001	100,524	93,037	92,438	87,117
Nebraska	148,712	143,221	145,516	145,806	143,499	142,901
Nevada	29,794	28,823	26,488	25,209	23,486	20,094
New Hampshire	34,900	33,000	43,792	42,086	34,009	33,002
New Jersey	273,278	248,000	239,906	224,269	219,139	215,188
New Mexico	62,441	64,000	62,014	78,425	78,700	69,343
New York	493,000	500,000	496,948	485,941	478,764	474,368
North Carolina	297,306	276,372	268,270	247,403	241,488	227,769
North Dakota	103,000	98,176	94,564	92,482	90,165	89,071
Ohio	419,000	405,064	397,122	379,934	373,179	360,000
Oklahoma	250,949	247,619	250,708	240,112	231,118	219,754
Oregon	66,994	66,905	78,167	84,520	89,660	86,682
Pennsylvania	517,189	603,000	588,465	533,680	536,530	507,681
Rhode Island	37,146	37,400	36,634	38,439	34,210	32,493
South Carolina	149,621	128,297	123,679	129,326	127,534	121,016
South Dakota	86,000	84,027	82,807	81,519	79,766	77,404
Tennessee	219,000	215,000	210,711	210,905	207,601	207,207
Texas	806,100	759,000	769,158	720,603	686,795	661,925
Utah	67,600	64,500	60,653	57,380	52,676	50,267
Vermont	15,400	15,000	15,170	14,867	15,040	15,208
Virginia	217,396	217,396	208,944	198,046	191,520	184,779
Washington	211,938	214,691	205,007	194,771	178,567	169,052
West Virginia	130,000	114,000	110,957	113,463	118,689	112,754
Wisconsin	244,016	235,846	224,053	253,773	231,638	226,175
Wyoming	53,623	52,127	51,127	49,127	47,132	44,685
Total	10,601,316	10,320,587	9,974,611	9,744,398	9,208,864	8,988,560

†—Includes light commercial vehicles registered as passenger cars.

TOTAL U.S. TRUCK REGISTRATIONS

Now Exceed 10.6 Million

Year	Units	% Gain
1923	1,612,969	17
1924	2,134,724	32
1925	2,440,654	14
1926	2,764,222	13
1927	2,914,019	5
1928	3,113,999	7
1929	3,379,854	8
1930	3,488,019	3
1931	3,488,571	- 0.6
1932	3,229,315	- 0.7
1933	3,227,357	- 0.6
1934	3,409,335	5.5
1935	3,668,705	7.1
1936	3,881,755	9.1
1937	4,107,244	3.1
1938	4,210,022	2.5
1939	4,419,093	5.0
1940	4,604,722	4.2
1941	4,859,662	5.5
1942	4,844,209	- 4.4
1943	4,549,882	- 2.0
1944	4,516,157	- 0.7
1945	4,908,778	8.8
1946	5,749,643	17.1
1947	6,612,922	15.0
1948	7,356,553	11.2
1949	7,615,431	3.5
1950	8,185,948	7.5
1951	8,696,224	6.2
1952	8,868,560	3.4
1953	9,208,864	2.5
1954	9,744,398	6.0
1955	9,974,611	2.4
1956	10,320,587	3.5
1957	10,610,316	2.8

Over Half of Trucks Are Under 3 Ton

How do truck registrations divide among various weight classes and vehicle types? Bureau of Public Roads took

1954 truck registrations, came up with the answer shown in the chart. It first appeared in the February, 1958, issue of the BPR's magazine, Public Roads.

Registered gross weight	Single-unit trucks						Vehicle combinations				Total	
	2-axle, 4-tire		2-axle, 6-tire		3-axle		Tractor-semitrailer		Truck-trailer			
	Number	Distribution	Number	Distribution	Number	Distribution	Number	Distribution	Number	Distribution	Number	Distribution
<i>Pounds</i>	<i>Thousands</i>	<i>Percent</i>	<i>Thousands</i>	<i>Percent</i>	<i>Thousands</i>	<i>Percent</i>	<i>Thousands</i>	<i>Percent</i>	<i>Thousands</i>	<i>Percent</i>	<i>Thousands</i>	<i>Percent</i>
6,000 and under.....	4,970	52.900	182	1.940	.....	.....	.....	.....	.....	.....	5,152	54.740
6,001-8,000.....	383	6.200	326	3.460	.....	.....	.....	.....	.....	.....	309	3.400
8,001-10,000.....	235	2.500	452	4.800	.....	.....	.....	.....	.....	.....	687	7.300
10,001-12,000.....	94	1.000	471	5.000	.....	.....	.....	.....	.....	.....	565	6.000
12,001-16,000.....	.....	.....	700	7.440	19	0.200	31	0.330	3	0.030	753	8.000
16,001-20,000.....	.....	.....	411	4.360	28	.300	31	.330	1	.010	471	5.000
20,001-24,000.....	.....	.....	151	1.615	19	.200	78	.825	6	.060	254	2.700
24,001-30,000.....	.....	.....	65	.685	28	.300	39	.415	9	.100	141	1.500
30,001-40,000.....	.....	.....	66	.700	69	.735	87	.925	4	.040	226	2.400
Over 40,000.....	.....	.....	.....	.....	25	.265	205	2.175	24	.260	254	2.700
Total.....	5,882	62.500	2,824	30.000	188	2.000	471	5.000	47	.500	9,412	100.000

Specify

End battery and electrical breakdowns

leece-neville ALTERNATOR SYSTEMS

THE BEST GENERATOR EQUIPMENT YOU CAN BUY!



Leece-Neville alternators supply ample electric current to permit full use of all lights, accessories and radios . . . at all vehicle speeds. Unlike conventional generators, L-N alternators start charging as soon as the engine is started and deliver maximum output at low engine speed.

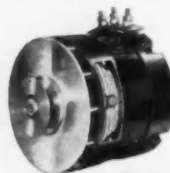
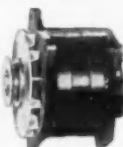
Whether your operation is stop-start, over-the-road, or a combination involving heavy city traffic, you'll find an economical L-N generating system exactly suited to your requirements.

You can eliminate electrical failures on the road, cut maintenance costs and boost operating efficiency with LEECE-NEVILLE ALTERNATORS . . . available as factory-installed original equipment or as replacements through L-N field service distributors, located in all principal cities.

AA-5786

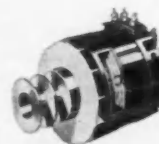
3 L-N ALTERNATOR SYSTEMS . . .

L-N STANDARD Alternator, with companion regulator and rectifier . . . an extremely popular generating system because of its universal adaptability and low price. L-N STANDARD Alternators are widely used on passenger cars, light and medium duty trucks, school buses, taxicabs and police cars. Both 6 and 12 volt systems are offered.*



L-N HEAVY-DUTY Alternator, with companion regulator and rectifier . . . supplies 95 amperes at 6 volts; 50, 60 or 100 amperes at 12 volts.* Added advantages include unusually high output at idle . . . also can provide up to 1200 watts of mobile 110 volt power. Used on passenger cars, trucks, buses and emergency vehicles of all types.

L-N EXTRA HEAVY-DUTY Alternator, with companion regulator and rectifier . . . provides 60 to 95 amperes at 6 volts; 60, 100 or 125 amperes at 12 volts.* Especially designed for multiple-belt drives and severest operating conditions, either over-the-road or off-highway. Bonus features include 1200 watt mobile 110 volt power supply. Generally used on heavy trucks, buses, large emergency and off-highway units.



* L-N 24 and 32 volt alternator systems also available.

**YOU CAN
RELY ON**

**Leece-
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THE LEECE-NEVILLE COMPANY • CLEVELAND 3, OHIO

Manufacturers of Automotive Electrical Equipment since 1909

TRUCK • BUS • DIESEL • INDUSTRIAL • PASSENGER • RAILROAD • MARINE • OFF-HIGHWAY



ALTERNATOR SYSTEMS



D.C. GENERATORS



REGULATORS



CRANKING MOTORS



SWITCHES



SMALL MOTORS

BUS FACTS

INTERCITY PASSENGER MILES TRAVELED

Share of Traffic Shows Little Change

Year	Total Intercity Travel	Private Automobiles		Railroads		Intercity Buses		Air Lines		Waterways	
		Pgr. Miles	% of Total	Pgr. Miles	% of Total	Pgr. Miles	% of Total	Pgr. Miles	% of Total	Pgr. Miles	% of Total
1956	686.8	617.7	88.4	28.5	4.1	25.2	3.6	25.5	3.6	1.9	0.3
1955	664.5	585.8	88.2	29.7	4.3	25.5	3.8	22.7	3.4	1.7	0.3
1954	625.1	548.8	87.8	29.5	4.7	25.6	4.1	19.6	3.1	1.7	0.3
1953	606.8	529.2	86.9	32.3	5.3	28.4	4.7	17.4	2.8	1.5	0.3
1952	575.2	495.5	86.1	34.7	6.0	26.7	5.0	15.0	2.6	1.4	0.3

Source: Compiled by National Assn. of Motorbus Operators from records of Interstate Commerce Commission.

NEW TRANSIT EQUIPMENT

Year	Railway			Trolley Coaches	Motor Buses	Grand Total
	Surface	Subway and Elevated	Total			
1952	19	0	19	224	1,749	1,992
1953	0	0	0	0	2,246	2,246
1954	0	260	260	0	2,225	2,485
1955	0	256	256	43	2,086	2,429
1956	0	376	376	0	2,759	3,135

Source: American Transit Assn.

TRANSIT RIDERS

Year	Railway (Millions of Persons)			Trolley Coaches	Motor Buses	Grand Total
	Surface	Subway and Elevated	Total			
1952	2,477	2,124	4,601	1,640	8,878	15,119
1953	2,036	2,040	4,076	1,568	8,290	13,902
1954	1,489	1,912	3,401	1,367	7,624	12,392
1955	1,207	1,870	3,077	1,282	7,250	11,529
1956	876	1,880	2,756	1,142	7,043	10,941

Source: American Transit Assn.

REVENUE BUS FACTORY SALES

	1957	1956	1955	1954	1953	1952	1951	1950	1949	1948
January	269	253	190	405	254	778	661	219	606	1,382
February	236	278	176	326	190	625	521	133	418	1,101
March	341	434	325	348	236	569	629	199	548	1,430
April	566	371	519	379	145	597	819	256	514	1,056
May	462	362	313	323	307	423	742	412	594	1,268
June	389	503	309	361	390	484	636	660	632	1,068
July	309	307	296	245	376	224	665	387	439	1,012
August	315	429	434	309	447	349	783	487	444	771
September	243	368	223	326	348	387	743	423	296	1,143
October	233	296	469	372	519	389	1,174	553	322	679
November	241	233	359	306	371	319	633	664	306	545
December	267	228	410	427	424	231	848	665	369	624
Total	3,833	4,064	4,023	4,118	4,087	5,375	9,453	4,908	5,511	12,299

As reported by the Automobile Manufacturers Assn. From plants located in the United States.

BUS FACTORY SALES BY TYPE OF BUS

Year	U. S. Domestic Market				Total Sales			Average Wholesale Value
	City Type	Intercity Type	Special Type	Total Domestic Market	Total Export Market	Units	Wholesale Value	
1957	1,857	1,100	353	3,310	523	3,833	\$74,605,000	\$19,516
1956	2,501	722	394	3,617	447	4,064	75,636,000	18,660
1955	2,317	916	366	3,599	424	4,023	74,207,000	18,446
1954	2,407	834	541	3,782	336	4,118	71,973,000	17,478
1953	2,290	855	586	3,731	326	4,057	68,271,000	16,828
1952	1,997	691	1,823	4,511	864	5,375	77,336,000	14,369
1951	4,754	1,233	2,797	8,784	678	9,462	135,660,000	14,339
1950	2,746	561	683	4,012	896	4,908	96,246,000	13,486
1949	3,402	690	802	4,894	617	5,511	72,945,000	13,236
1948	6,971	2,558	997	10,526	1,773	12,299	178,381,000	14,504

Source: Automobile Manufacturers Assn. Chart does not include nonintegral school buses. †—Including integral school buses.

TRUCK FACTORY SALES BY GVW, 1953-1957

	6,000 lb and less	6,001-10,000	10,001-14,000	14,001-16,000	16,001-19,500	19,501-26,000	26,001-33,000	Over 33,000	Total
Total Factory Sales from U. S. Plants									
1957	546,734	160,409	36,657	162,088	72,100	53,163	37,533	33,659	1,103,343
1956	438,678	209,401	39,918	192,157	82,493	56,492	81,290	**	1,100,417
1955	585,866	212,571	46,806	225,755	65,719	43,413	64,769	**	1,244,968
1954	482,518	186,733	39,073	195,121	48,586	45,111	40,943	**	1,036,056
1953	563,112	221,617	46,624	198,115	49,628	66,773	49,140	**	1,202,209

In Per Cent of Total Factory Sales

	49.6%	14.5%	3.3%	14.8%	6.5%	4.8%	3.4%	3.1%	100.0%
1957	49.6%	14.5%	3.3%	14.8%	6.5%	4.8%	3.4%	3.1%	100.0%
1956	39.9%	19.0%	3.6%	17.6%	7.5%	5.1%	7.4%	**	100.0%
1955	47.0%	17.1%	3.8%	18.1%	5.3%	3.5%	5.2%	**	100.0%
1954	46.5%	18.0%	3.9%	18.8%	4.7%	4.3%	3.8%	**	100.0%
1953	46.8%	18.5%	3.9%	15.4%	4.1%	7.2%	4.1%	**	100.0%

Source: Automobile Manufacturers' Association.

*—Included in 26,001-33,000 lb group.

TRAILER FACTS

TRAILER SHIPMENTS BY MONTHS

August Was Peak Month in '57

	1957		1956	
	Units	Value	Units	Value
January	4,964	\$24,994,000	4,856	\$23,268,000
February	5,233	26,350,000	4,836	23,688,000
March	5,457	27,261,000	6,659	31,326,000
April	5,458	27,026,000	6,994	34,009,000
May	5,645	27,368,000	7,178	35,106,000
June	5,148	25,146,000	6,974	34,463,000
July	4,335	21,066,000	5,001	24,683,000
August	5,809	26,972,000	5,780	27,939,000
September	4,820	24,525,000	4,838	23,758,000
October	4,974	26,703,000	5,438	26,230,000
November	4,216	21,653,000	4,932	23,600,000
December	3,589	19,426,000	4,278	21,156,000
Total	59,748	\$300,490,000	67,824	\$329,230,000

Source: Industry Division, Bureau of the Census.

TRAILER SHIPMENTS BY TYPE

Racks, Livestock and Stake Show Gain

Type of Trailer	1957	1956	1955	1954
Vans:				
Insulated and refrigerated	4,424	5,164	5,203	4,250
Steel	604	1,055	1,117	831
Aluminum	3,820	4,109	4,086	3,419
Semi-insulated	641	N.A.	N.A.	N.A.
Steel	641	N.A.	N.A.	N.A.
Aluminum	641	N.A.	N.A.	N.A.
Furniture	1,548	2,110	1,943	1,141
Steel	1,548	2,110	1,732	1,061
Aluminum	1,548	2,110	211	80
All other closed-top vans	20,678	25,670	34,387	18,155
Steel	9,226	11,285	10,865	6,733
Aluminum	11,452	14,385	23,522	11,422
Open-top vans	3,164	3,738	4,566	2,196
Steel	1,564	1,753	2,062	1,070
Aluminum	1,600	1,985	2,503	1,116
Total—Vans	30,453	36,682	46,086	25,732
Tanks:				
Petroleum	4,227	5,433	5,068	5,433
All other	1,391	1,069	644	854
Total—Tanks	5,618	6,502	5,712	6,087
Pole, pipe and logging:				
Single axle	377	587	789	599
Tandem axle	616	1,300	1,372	797
Total—Tanks	993	1,887	2,161	1,396
Platforms:				
Racks, livestock and stake	2,611	1,004	1,300	888
Grain bodies, all types	1,259	1,836	1,016	785
Flats, all types	6,339	8,441	8,328	5,333
Total—Platforms	10,209	11,821	10,644	7,005
Low-bed heavy haulers	2,782	2,995	2,931	3,090
Dump trailers	1,947	2,067	2,128	996
All other trailers	3,479	2,790	4,034	7,938
Total—Complete Trailers	55,461	64,164	73,708	52,243
Trailer Chassis	4,287	3,660	2,760	2,294
Total—Trailers and Chassis	59,748	67,824	76,468	54,537

N.A.—Not available. 1—Includes Food and L.P.G. trailers.

**—Includes off-highway, auto transport, public utility trailers and converter dollies.

Source: Industry Division, Bureau of the Census.

TRAILER REGISTRATIONS

3.6 Million for '57

Trailers—Semi-Trailers

State	Tourist	Com- mercial	Total
Alabama		17,958	17,958
Arizona	35,484	10,045	45,529
Arkansas		40,561	40,561
California		584,116	584,116
Colorado		52,358	52,358
Connecticut	29,018	8,154	34,172
Delaware			10,353
District of Columbia			1,438
Florida	155,600	46,309	201,909
Georgia	32,945	15,166	48,111
Idaho	38,900	200	39,100
Illinois			116,604
Indiana	7,300	143,030	150,330
Iowa			119,732
Kansas			24,690
Kentucky			13,269
Louisiana	36,661	21,633	58,494
Maine			33,441
Maryland		29,216	29,216
Massachusetts			91,126
Michigan	23,841	296,132	321,973
Minnesota	28,811	38,882	67,793
Mississippi	15,600	9,082	24,682
Missouri	58,000	42,000	98,000
Montana	15,291	12,560	27,841
Nebraska	56,545	11,161	67,706
Nevada			10,125
New Hampshire			19,750
New Jersey			47,517
New Mexico			22,296
New York			148,000
North Carolina	84,229	24,001	108,230
North Dakota	1,957	650	2,607
Ohio	13,389	212,783	226,172
Oklahoma	7,130	14,916	22,046
Oregon	13,218	20,724	33,942
Pennsylvania	68,767	43,894	112,661
Rhode Island		14,683	14,683
South Carolina	2,532	15,787	18,319
South Dakota		38,560	38,560
Tennessee	6,000		6,000
Texas	26,000	240,000	266,000
Utah			8,700
Vermont			9,816
Virginia	38,054	20,816	58,870
Washington	75,361	18,748	94,109
West Virginia	700	6,500	7,200
Wisconsin	8,842	17,503	26,348
Wyoming	7,418	13,461	20,879
Total	882,603	2,031,431	3,637,452

TRUCK TRAILER SHIPMENTS

By Years, 1948-1957

	Production	Units	Value
1957	58,197	59,748	\$300,490,000
1956	71,140	67,824	329,230,000
1955	77,967	76,468	371,413,000
1954	85,399	84,562	245,501,000
1953	97,102	96,699	294,849,000
1952	57,078	57,973	228,378,000
1951	67,384	64,691	245,315,000
1950	64,617	65,966	229,685,000
1949	33,097	34,273	119,098,000
1948	44,478	46,960	139,996,000

Source: Industry Division, Bureau of the Census.

all new from Stewart-Warner...

MODEL 240 A

electric fuel pump

for instant starts... and constant, positive
fuel flow both winter and summer!



**ONLY STEWART-WARNER OFFERS ALL THESE
ADVANTAGES AND SUPERIOR FEATURES:**

Highest delivery rate! Up to 60 gallons per hour, with oversize piston, coil and power spring.

Adjustable pressure! Pump can be easily adjusted from 1 PSI up to 7½ PSI to give exact shut-off pressure required by any carburetor.

Built-in automatic pressure regulator! Prevents flooding and starving. Maintains desired pressure at carburetor... gives smooth, steady fuel supply... eliminates surging.

Built-in fuel filter! Extra-large reservoir and oversize filter element.

Easy wiring and installation! Battery can be either positive or negative ground.

Serviceable in field! Routine maintenance—even complete overhaul—can be done by your own service personnel.

Minimum inventory! Just two models—6-volt and 12-volt.

For cars, trucks and all gasoline engines • See your wholesale supplier for details

... Plus another great new product from Stewart-Warner

the Stewart-Warner... "national" governor

Controls engine speed for greatest fuel economy... reduces maintenance costs!

- For gasoline engines on trucks or cars—adaptable for propane and butane.
- Prevents over-speeding in any gear.
- Maintains engine speeds within the most efficient and economical operating range.

Junior and Senior models available for either low or high speed settings.



- Permits normal engine operation at all speeds below governed speed.
- Vacuum spark controls not affected below governed speeds. No vacuum attachments required—operation not affected by altitude.
- Does not affect automatic gear shift.
- Reduces tire and brake wear, gasoline and oil consumption due to excessive speeds. Reduces accidents, engine overhauls, repair bills.

See your dealer for complete details, or write
Stewart-Warner Instrument Division, Dept. IN-58,
1840 Diversey Parkway, Chicago 14, Ill.



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STEWART-WARNER
CORPORATION

for safe,
dependable
fleet
performance,
install
Stewart-Warner
instruments



Rugged, vibration-proof universal-mounting gauges. Ammeters, water temperature and oil gauges, vacuum gauges.



Sturdy electric tachometers with full 270° dial range. Easy to install. Not affected by variations in temperature or electrical system voltage.



Packaged flexible shafts... replacement speedometer and tachometer cores. Flexible... non-raveling... minimum backlash.

... including quality drive equipment for complete replacement installations!

SECTION

3

OPERATION

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STATE SIZE & WEIGHT LIMITS

STATE	SIZE RESTRICTIONS						GROSS WEIGHT			PRACTICAL GROSS WEIGHT LIMITS (In thousands of pounds)										
	Width (Inches)	Height (Feet)	LENGTH			Minimum Tandem Axle Spacing	(LEGAL LIMITS)			Below Limits Apply to Pneumatic Tires Unless Otherwise Specified										
			Single Unit	Tractor Semi-Trailer	Other Combinations		Number of Trailers (Semi-Trailer = ½)	Pounds Per Inch of Tire Width	Per Axle (1000 lb.)	Tandem Axles 4 feet apart (1000 lb.)	4-Wheel Single Unit	6-Wheel Single Unit	4-Wn. Tractor 2-Wn. Semi-Tr.	4-Wn. Tractor 4-Wn. Semi-Tr.	6-Wn. Tractor 4-Wn. Semi-Tr.	4-Wn. Truck 4-Wn. Trailer	4-Wn. Truck 6-Wn. Trailer	6-Wn. Truck 4-Wn. Trailer	6-Wn. Truck 6-Wn. Trailer	Tractor, Semi-T. & Full Trailer Combs.
Ala. TVY	96	m 12½	35k	50	NP	½	40	NS	18	36	36	54	54	64.6	64.6	NP	NP	NP	NP	NP
Ariz. Y	102	13½	40	65	65	1½	40	NS	18	32	36	50	54	68	76.8	72	76.8	76.8	76.8	76.8
Ark. V	96	13½	35k	50	50	NR	40	NS	18	32	18b	32b	36b	50b	56b	54b	56b	56b	56b	56b
Cal. Y	d 96	13½	35ak	60	60	NR	NS	NS-P 600-S	18	32	36	50	54	68	76.8	72	76.8	76.8	76.8	76.8
Colo. X	e 96	13½w	35ak	60	60	2	40	NR	18-l 16-J	36	30	46	*54	*72	*73.6	72	*73.6	*73.6	*73.6	*73.6
Conn. T	102	12½	45	45	NP	½	NS	NS-P 800-S	22.4	36	32	50	50	60	60	NP	NP	NP	NP	NP
Del. V	96	m 12½	35k	50	60	1½	48	700	20	36	30c	46c	48c	60c	60c	52c	52c	60c	60c	60c
D. C. VY	96	12½	35	50	50	1 or ½	40	NS	22	38	44	60	65.4	65.4	65.4	65.4	65.4	65.4	65.4	NP
Fla. Y	96	m 12½	40a	50	50	1 or ½	40	550	20	40	40	60	60	64.6	64.6	64.6	64.6	64.6	64.6	NP
Ga. Y	96	13½	39.5kn	48	48	1 or ½	40	NR	20.3ln 18-Jn	40.6n	40.6n	61n	63.2n	63.2n	63.2n	63.2n	63.2n	63.2n	63.2n	NP
Idaho Y	e 96	14	35f	60	65	1½	NS	800 ⁰	18	32	36	50	54	68	76.8	72	76.8	76.8	76.8	76.8
Ill. Z	96	13½	42	50	50	1½	40	800	18	32	36	41	45	59	68	63	72	72	72	72
Ind. Y	96	13½	36k	50	50	1½	40	800	18	32	36	50	54	68	72	72	72	72	72	72
Iowa TY	96	m 12½	35ak	50	NP	½	40	NR	18	32	36	50	54	65.4	65.4	NP	NP	NP	NP	NP
Kan. Y	e 96	12½	35ak	50	50	1 or ½	40	NR	18-l 16-J	32	36	50	54	63.8	63.8	63.8	63.8	63.8	63.8	NP
Ky. ZT	96	12½	35	48	NP	½	42	600	18	36	36	50	54	59.6	59.6	NP	NP	NP	NP	NP
La. Y	96	m 12½	35ak	50	60	1 or ½	40	450	18-l 16-J	32	18b	32b	36b	50b	64b	54b	54b	68b	68b	NP
Me. Y	96	12½	50	50	50	1 or ½	48	600	22-G	32	32	50	50	60	60	60	60	60	60	NP
Md. X	96	m 12½	55	55	55	NR	NS	NS	22.4	40	44.8	62.4	65	65	65	65	65	65	65	65
Mass. YT	e 96	NR	35k	45	NS	1 or ½	NS	800	22.4	36	44.8	60	60	60	60	47.8	47.8	63	63	NP
Mich. Y	96	m 12½	35kv	55	55	1½	42	700	18-P 16-S	26p	36-W	44-W	54-W	66-W	76-W	72-W	86-W	86-W	94-W	104-W
Minn. Y	e 96	m 12½	40	50	50	1 or ½	40	NR	18-P 10.8-S	32	36	50	54	68	72.5a	72	72.5a	72.5a	72.5a	NP
Miss. YZ	96	m 12½	35ak	45q	45	1 or ½	40	Table	18-l 16-J	29.6p	27	41	45	55.9	55.9	55.9	55.9	55.9	55.9	NP
Mo. Y	96	12½	35ak	50	50	NR	40	600	18-l 16-J	32	36	50	54	64.6	64.6	64.6	64.6	64.6	64.6	64.6
Mont. Y	e 96	13½	35k	60	60	1 or ½	40	NS	18	32	36	50	54	68	76.8	72	76.8	76.8	76.8	NP
Nebr. Y	96	13½	35ak	50	50	1 or ½	40	NR	18	32	36	50	54	64.6	64.6	64.6	64.6	64.6	64.6	NP
Nev. Y	96	NR	NR	NR	NR	NR	42	600	18	32	36	50	54	68	76.8	72	76.8	76.8	76.8	76.8
N. H. Y	96	13½	35u	45	45	NR	NS	600	22.4	36i	33.4	40j	52.8	66.4	66.4	66.4	66.4	66.4	66.4	66.4
N. J. Y	96	13½	35	50	50	1 or ½	40	800	22.4h	32	30	40	60	60	60	60	60	60	60	NP
N. M. VY	e 96	13½	40	65	65	1½	40	600	21.6	34.3	43.2	55.9	64.8	77.5	86.4	86.4	86.4	86.4	86.4	86.4
N. Y. X	96	13	35ak	50	50	1 or ½	46	800-P 640-S	22.4	36	44.8	58.4	65	65	65	65	65	65	65	NP

STATE	SIZE RESTRICTIONS							GROSS WEIGHT			(See NOTE)	PRACTICAL GROSS WEIGHT LIMITS (In thousands of pounds)										
	Width (Inches)	Height (Feet)	LENGTH			Minimum Tandem Axle Spacing	(LEGAL LIMITS)			Below Limits Apply to Pneumatic Tires Unless Otherwise Specified												
			Single Unit	Tractor Semi-Trailer	Other Combinations		Number of Trailers (Semi-Trailer— $\frac{1}{2}$)	Pounds Per Inch of Tire Width	Per Axle (1000 lb.)	Tandem Axles 4 feet apart (1000 lb.)	4-Wheel Single Unit	6-Wheel Single Unit	4-Wheel Tractor 2-Wheel Semi-Tr.	4-Wheel Tractor 4-Wheel Semi-Tr.	6-Wheel Tractor 4-Wheel Semi-Tr.	4-Wheel Truck 4-Wheel Trailer	4-Wheel Truck 6-Wheel Trailer	6-Wheel Truck 4-Wheel Trailer	6-Wheel Truck 6-Wheel Trailer	Tractor, Semi-Tr., & Full Trailer Combs.		
N. C.	96	12½	35sk	50	50	1 or ½	48	600	18-19 In 17-In	36n	L 31.5n	L 46.2n	46.2n	56.8n	56.8n	56.8n	56.8n	56.8n	56.8n	NP		
N. D.	96	13½	40n	50	50	1 or ½	40	550	18	30	36	48	54	*61.5	*61.5	*61.5	*61.5	*61.5	*61.5	NP		
Ohio	96	13½	35sk	50	60	NR	NS	650	19	24p	38	50.5	57	69.5	*71.6	76	78	78	78	78		
Okl.	96	13½	35k	50	50	1 or ½	40	650	18	32	36	50	54	66	66	66	66	66	66	NP		
Ore.	96	12½	35	50g	50y	1 or ½	40	550	18	32	36	50	54	60	60	60	60	60	60	NP		
Pa.	96	12½	35kr	50	50	1 or ½	36	800	22.4	38	H 33	H 47	H 50	H 60	H 60	H 62	H 62	H 62	H 62	NP		
R. I.	102	12½	40	50	50	1 or ½	40	800	22.4	NS	36	44	50	50	50	72	80	80	88	NP		
S. C.	96	12½	40n	50	50	1 or ½	40	NR	20-1 16-J	32	40	52	60	68.3	68.3	68.3	68.3	68.3	68.3	NP		
S. D.	96	13	35k	50	60	1 or ½	40	600	18-1 16-J	32	36	50	54	68	73.2	72	73.2	73.2	73.2	NP		
Tenn.	96	12½	35k	45	45	1 or ½	40	NS	18	32	36	50	54	55.9	55.9	39.5	39.5	53.5	53.5	NP		
Tex.	96	13½	35k	50	50	1 or ½	40	650-1 600-J	18-1 16-J	32	36	50	54	56.4	56.4	56.4	56.4	56.4	56.4	NP		
Utah	96	14	45	60	60	2	40	NS	18-P 13.5-S	33	36	51	54	69	79.9	72	79.9	79.9	79.9	79.9		
Vt.	96	12½	50	50	50	1 or ½	40	600	NR	NR	30	40	50	60	60	50	60	50	60	NP		
Va.	96	12½	35k	50	50	1 or ½	40	650	18	32	36	50	54	56.8	56.8	56.8	56.8	56.8	56.8	NP		
Wash.	96	12½	35k	60	60	1½	42	500	18	32	28	36	46	60	68	64	64	72	72	72		
W. Va.	96	12½	35sk	50	50	1 or ½	40	NR	18	32	36	50	54	60.8	60.8	60.8	60.8	60.8	60.8	NP		
Wis.	96d	12½	35k	50	50	1 or ½	40	800	18-C 12-D	32	36C	48C	54C	66C	68C	68C	68C	68C	68C	NP		
Wyo.	96	13½	40	60	60	2	40	NS	18	32	36	50	54	68	73.9	72	73.9	73.9	73.9	73.9		

NOTE ON "W" AND ASTERISK

Except when shown by asterisk or when followed by the letter "W," the above gross weight limits are the limits fixed by state law.

When shown by asterisk the above limits are computations made by the National Highway Users Conference to show what it considers to be practical gross weights where gross weights are arrived at by application of one of the formulas shown below under Footnote "X." In making these computations, wheel base is arrived at by deducting 8 ft. total over-hang front and rear from permissible overall length of unit or combination; tandem axles are considered to be a minimum permissible distance apart. When actual over-hang is less than 8 ft. additional gross weight will be possible.

When followed by the letter "W," the limits shown are maximum possible weights where gross weight is determined by permissible axle weight. These limits are possible only when each axle carries a gross weight equal to the permissible axle limit as shown.

*—See Note above.

Table—There is a table of axle weight based upon tire widths.

a—Vehicles over 35-ft length must have 3 axles.

b—Plus weight on front axle of vehicle.

c—With power brakes.

d—104 in. for urban uses.

e—102-in. buses permitted subject to certain restrictions.

f—40-ft. 2-axle vehicle permitted on designated highways.

g—60 ft on enumerated highways (major interstate routes), 40-ft semi-trailers permitted subject to certain restrictions.

h—Vehicles registered after March 1, 1956.

i—Except on 3-axle single units.

j—47.5 ft drive on both rear axles.

k—Buses permitted 40 ft in Va.; 42 ft in Del.; 45 ft in Okla.; 45.2 in Ga.

m—Auto transporters allowed 13 $\frac{1}{2}$ ft (also covered vans in Wash., baled hay or straw carriers in Md., hay, straw or small boat carriers in Mich.).

n—Including tolerance.

o—Graduated according to tire width.

p—Mich.—32,000 lbs on one set of tandem axles in a combination on designated highways; Miss.

32,000 lbs on designated highways; Ohio—31,500 lbs on axles

spaced over 4 ft but less than 5 ft apart.

q—50 ft for auto transporters.

r—20-in. tolerance permitted auto transporter semi-trailers.

s—Buses permitted 40 ft on designated highways.

t—40 ft for auto transporters and moving vans.

w—On designated highways.

y—Three-unit combinations with lengths up to 60 ft permitted on State Highway Route Nos. 86 and 242.

A—4 consecutive axles of 5-axle combination may not exceed 60,000 lbs.

C—On "Class A" highways.

D—On "Class B" highways.

G—Axles less than 10 ft apart limited to 16,000 lbs per axle.

H—Maximum shown. In practice, permissible gross weight depends on class.

I—Permissible on balloon tires.

J—Other than balloon tires.

L—2-axle buses permitted 23,625 lbs the maximum net weight; 3-axle bus, 31,500 lbs.

NP—Not permitted.

NR—No restriction.

NS—Not specified.

P—Pneumatic tires.

S—Solid tires.

T—With the following exceptions full trailers are permitted the same gross weight as other single units:—

Ala., Conn., Iowa, Ky.—Full trailers prohibited.

Mass.—Trailer and load limited to 3,000 lbs.

Tenn.—Trailer and load limited to 3,500 lbs.

V—Solid tires prohibited.

W—See Note above.

X—States where gross weight is determined by formula. See "Bridge Formulae" on next page.

Y—States where gross weight is determined by total of axle spacing. See "Axle Spacing" on next page.

Z—See "Restrictions Peculiar to Certain States" on next page.

STATE SIZE & WEIGHT LIMITS

Continued from Page 191

AXLE SPACING

Ala. —Gross weights graduated from 32,000 lbs if axle spacing is 4 ft to 64,650 lbs if spacing is 45 ft or more.	Ariz. & Calif. —Gross weights graduated from 32,000 lbs if axle spacing is 4 ft to 76,800 lbs if spacing is 56 ft or more.	Del. —Gross weights graduated from 36,000 lbs if axle spacing is 4 ft to 60,000 lbs if spacing is 39 ft or more.	D. C. —Gross weights graduated from 38,000 lbs if axle spacing is 4 ft to 65,400 lbs if spacing is 45 ft.	Fla. —Gross weights graduated from 32,000 lbs if axle spacing is 4 ft to 64,650 lbs if spacing is 45 ft.	Idaho —Gross weights graduated from 30,500 lbs if axle spacing is 3 ft to 76,800 lbs if spacing is 56 ft or more; separate table of axle spacing ranging from 37,800 to 79,000 lbs for haulers of wood, aggregates, cattle and farm products plus 5% tolerance on wheel and axle loads.	Iowa —Gross weights graduated from 32,000 lbs if axle spacing is 4 ft to 65,478 lbs if spacing is 42 ft or more.	Kans. —Gross weights graduated from 32,000 lbs if axle spacing is 4 ft to 63,890 lbs if spacing is 44 ft.	Maine —Gross weights graduated from 32,000 lbs if axle spacing is 4 ft to 50,000 lbs if spacing is 27 ft or more for 3-axle vehicles and to 60,000 lbs if axle spacing is 31 ft or more for 4-axle vehicles.	Mass. —Gross weights graduated from 32,000 lbs if axle spacing is 4 ft to 60,000 lbs if spacing is 35 ft or more.	Minn. —Gross weights graduated from 28,000 lbs if axle spacing is 4 ft to 72,500 lbs if spacing is 45 ft or more.	Miss. —Gross weights graduated from 28,650 lbs if axle spacing is 4 ft to 32,650 lbs if spacing is 30 ft or more; on designated highways from 32,000 lbs if spacing is 4 ft to 55,980 lbs if spacing is 34 ft or more.	Mo. —Gross weights graduated from 32,000 lbs if axle spacing is 4 ft to 61,650 lbs if spacing is 45 ft or more.	Mont. —Gross weights graduated from 32,000 lbs if axle spacing is 4 ft to 78,800 lbs if spacing is 37 ft or more.	Nebr. —Gross weights graduated from 32,000 lbs if axle spacing is 4 ft to 64,650 lbs if spacing is 45 ft or more.	Nev. —Gross weights graduated from 32,000 lbs if axle spacing is 4 ft to 76,800 lbs if spacing is 56 ft or more.	N. H. —Gross weights graduated up to 52,800 for 3-axle combinations and to 60,400 lbs for 4-axle combinations.	N. M. —Gross weights graduated from 34,320 lbs if axle spacing is 4 ft to 86,400 lbs if spacing is 56 ft.	Okl. —Gross weights graduated from 32,000 lbs if axle spacing is 4 ft to 66,000 lbs if spacing is 38 ft or more.	Ore. —Gross weights graduated from 32,200 lbs if axle spacing is 6 ft to 76,000 lbs if spacing is 55 ft or more, provided that no vehicle or combination shall exceed 60,000 lbs except under permit.	S. C. —Gross weights graduated from 32,000 lbs if axle spacing is 4 ft to 68,350 lbs if axle spacing is 50 ft or more.	S. D. —Gross weights graduated from 32,000 lbs if axle spacing is 4 ft to 73,280 lbs if axle spacing is 45 ft or more.	Tenn. —Gross weights graduated from 32,000 lbs if axle spacing is 4 ft to 55,980 lbs if axle spacing is 37 ft or more.	Texas —Gross weights graduated from 32,000 lbs if axle spacing is 4 ft to 58,420 lbs if spacing is 41 ft.	Utah —Gross weights graduated from 33,000 lbs if axle spacing is 4 ft to 79,900 lbs if spacing is 54 ft or more.	Va. —Gross weights graduated from 32,000 lbs if axle spacing is 4 ft to 56,800 lbs. If axle spacing is 35 ft or more.	Wash. —Gross weights graduated from 32,000 lbs if axle spacing is 4 ft to 72,000 lbs if axle spacing is 57 ft or more.	W. Va. —Gross weights graduated from 32,000 lbs if axle spacing is 4 ft to 75,580 lbs if spacing is 57 ft.	Wise. —Gross weights graduated from 32,000 lbs., for spacing of 4 ft., to 68,000 lbs for 40 ft or more on Class A highways (including all tolerances).	Wyo. —Gross weights graduated from 32,600 lbs if axle spacing is 4 ft to 73,950 lbs if spacing is 57 ft.
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BRIDGE FORMULAE

Calo.—800 (L plus 40).

Md.—850 (L plus 40) any unit or combination, provided that gross weight of any vehicle or combination shall not exceed 65,000 lbs.

N. D.—750 (L plus 40) any unit or combination.
Ohio—800 (L plus 47½).

RESTRICTIONS PECULIAR TO CERTAIN STATES

ILL.—Limits shown are permissible on designated highway; otherwise limited to 16,000 lbs. on any one axle. Two axle truck limited to 32,000 lbs.
KY.—Limits shown are permissible on designated highways; otherwise limits are: height 11½ ft.; length—truck 26½ ft.; length—semi-trailer combination 30 ft.; gross weight 18,000 lbs.

MISS.—Gross weight limits shown are permissible on designated highway; on other highways, graduated from 28,650 lbs. if axle spacing is 4 ft to 52,650 lbs. if spacing is 30 ft. or more.
N. C.—Gross weight limit on most secondary highways 16,000 lbs for two axles and 24,000 lbs. for 3 axles.

U. S. GOVERNMENT FLEET OPERATING FACTS

As reported by the General Services Administration for the year ending June 30, 1957

		TRUCK—GROSS VEHICLE WEIGHT							Total
		All Automobiles	Station Wagons	Ambulances	Buses	Less than 12,500 (1 Ton & Less)	12,500 to 16,999 (1½-2½ Tons)	17,000 & Over (3 Tons & Over)	
Number of Vehicles	Civilian Agencies	20,034	1,516	345	1,043	65,219	11,407	4,706	104,270
	Dept. of Defense	13,069	3,272	1,903	5,960	46,512	23,306	10,951	100,973
	All Vehicles	33,103	4,788	2,248	7,003	111,731	34,713	15,657	214,243
Avg. Miles per Vehicle per Year	Civilian Agencies	12,500	11,011	4,566	11,703	9,285	6,454	9,360	9,604
	Dept. of Defense	13,188	21,278	5,548	9,319	9,125	4,844	5,454	8,788
	All Vehicles	12,823	17,672	5,311	9,671	9,215	5,418	6,621	9,180
Avg. Miles per Gallon of Fuel	Civilian Agencies	15.0	14.1	10.6	5.7	9.7	5.8	4.4	.....
	Dept. of Defense	13.6	12.9	9.5	5.7	10.7	7.2	4.3	.....
	All Vehicles	14.3	13.1	9.6	5.7	10.1	6.5	4.4	.....
Total Cost per Mile	Civilian Agencies	\$.0382	\$.0441	\$.0971	\$.1172	\$.0772	\$.1148	\$.1511	.....
	Dept. of Defense	.0625	.0747	.1930	.2680	.0695	.1107	.2648	.....
	All Vehicles	\$.0596	\$.0694	\$.1793	\$.2409	\$.0824	\$.1469	\$.2262	.....
Operation Cost per Mile	Civilian Agencies	\$.0261	\$.0272	\$.0487	\$.0600	\$.0344	\$.0494	\$.0617	.....
	Dept. of Defense	.0544	.0468	.1015	.1573	.0504	.0981	.1644	.....
	All Vehicles	\$.0398	\$.0428	\$.0940	\$.1399	\$.0412	\$.0774	\$.1210	.....
Maintenance Cost per Mile	Civilian Agencies	\$.0121	\$.0169	\$.0484	\$.0572	\$.0428	\$.0654	\$.0894	.....
	Dept. of Defense	.0280	.0270	.0914	.1106	.0390	.0725	.1203	.....
	All Vehicles	\$.0198	\$.0256	\$.0853	\$.1010	\$.0412	\$.0686	\$.1072	.....
Number of Vehicles Disposed of	Civilian Agencies	5,964	394	91	130	7,841	2,771	432	17,943
	Dept. of Defense	.....	.....	.....	.....	.....	.....	.....	.....
	All Vehicles	.....	.....	.....	.....	.....	.....	.....	.....

Source: As reported by General Services Administration for year ending June 30, 1957.

(1) Operation and Maintenance.

MIDLAND COMPRESSORS

*Are Your Best Buy
For Maximum
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**Compare Midland's Delivery
Curve With That For Any
Comparable Model And
Prove It To Yourself!**

Because Midland Air Compressors have greater built-in efficiency, they deliver more air at any given speed than comparable models of other makes. And they require less horsepower to do so!

These performance charts of tests run in Midland's testing laboratories clearly show the rapid, ever-increasing air delivery curve for both the popular Model 7.4 and the heavy-duty Model 12.

Compare them with performance charts for any other make compressor and see for yourself how much better Midland Compressors perform.

In addition to delivering more air, these dependable compressors are lighter, run cooler, protect you against oil passage and carbon. See your nearest Midland Distributor or write the factory direct.

MIDLAND-ROSS CORPORATION

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Export Department: 38 Pearl Street, New York, N.Y.

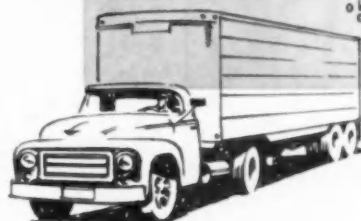
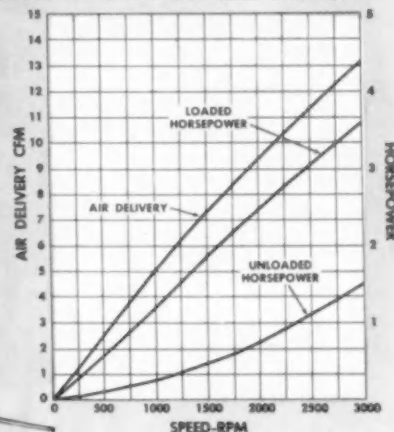


**The Only Complete Line of
Braking Equipment**

COMMERCIAL CAR JOURNAL, April, 1958

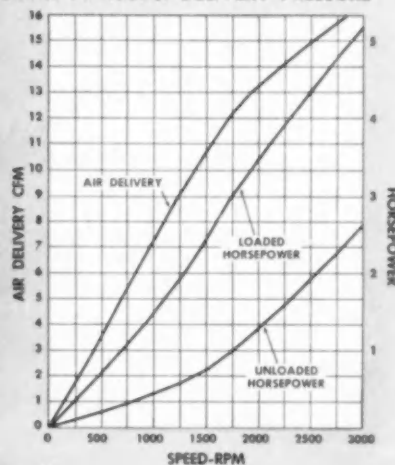
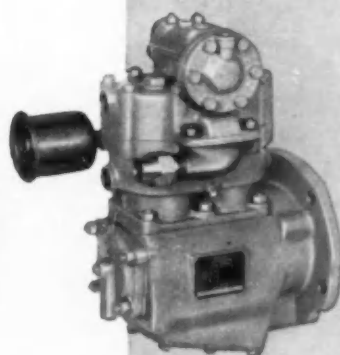
MIDLAND MODEL 7.4

PERFORMANCE AT 100PSI DELIVERY PRESSURE



MIDLAND MODEL 12

PERFORMANCE AT 100PSI DELIVERY PRESSURE



STATE LAWS MAY DIFFER

but one
thing is
certain:

Signal-Stat

is the recognized
standard
for compliance
as well as
quality!
performance!
value!

Class A—Type 1 Directional Signals ■ Switches ■
Flashers ■ Stop & Tail Lamps ■ Clearance, Marker,
Identification, Emergency Warning & Utility Lamps.

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Always creating—never imitating

Signal-Stat Corporation, 523-539 Kent Avenue
Brooklyn 11, N. Y.

if you are
interested in
TURN
SIGNAL LAWS

you **MUST**
be interested
in

Signal-Stat

Class A—Type 1 Directional Signals ■ Switches
■ Flashers ■ Exclusive "Sigflare Systems"

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Always creating—never imitating

Signal-Stat Corporation, 523-539 Kent Avenue
Brooklyn 11, N. Y.

SAFETY EQUIPMENT

... Required and permitted on trucks, truck-tractors, trailers and buses as specified in ICC safety rules and regulations, state motor vehicle laws and official rulings . . . Compiled by National Highway Users Conference

FOR TABULATION OF SAFETY REQUIREMENTS, SEE PAGES 198 & 199

EXPLANATION OF ICC REFERENCES

‡—The I.C.C. Motor Carrier Safety Regulations apply to "Automotive Safety Equipment" on vehicles operated by common and contract carriers ("for hire" carriers) of persons or property and by private carriers of property, when operated regularly in interstate or foreign commerce except when operated wholly within a municipality, between contiguous municipalities, or within a zone adjacent to and commercially a part of any such municipality or municipalities. When vehicles of common, contract or private carriers are transporting explosives or other dangerous articles the last-mentioned exception does not apply.

†—Requires "a device or other means of preventing or removing ice or frost" from windshield.

*—I.C.C. neither approves nor disapproves any individual required item. Its Motor Carrier Safety Regulations, however, set forth certain constructional details or performance standards to which certain items must conform. Reference should be made to the Motor Carrier Safety Rules for complete details.

COLOR AND REQUIREMENT SYMBOLS

A—Amber
G—Green
R—Red
N—No
NP—Not Permitted
NR—Not Required
NS—Not Specified

NSM—Not Specifically Mentioned
Y—Yes
Ye—Yellow
W—White
/—when used between two letters or numbers means "or,"
Example—2/4 means "2 or 4."

GENERAL FOOTNOTES

a—Prohibits red light visible from in front of vehicle.
b—Prohibits red or green light visible from in front of vehicle.
c—Tail lamp or separate lamp shall illuminate rear license plate with white light.
d—Must be located and constructed so as to illuminate rear license plate with white light.
e—May be incorporated in tail lamp.
f—Semaphores required on school buses.
g—One or both may be incorporated in tail lamp or lamps.
h—Number plate must be illuminated with white light.
i—Reciprocity on commercial vehicle lighting equipment exists between New York and a majority of the states.
j—Also two yellow or amber reflectors on front of vehicle.
k—One may be part of tail lamp.
l—Permitted on commercial vehicles over 80 in. wide.
m—Reflectors may be substituted.
n—Reflectors may be used when vehicle has acetylene lamps.
o—Two required on new vehicles first registered after Jan. 1, 1958.
p—White, green or amber. Where green originally used, may be continued till replacements are necessary.
q—Signal lamps are specified. In Wisconsin, new vehicles after Jan. 1, 1958.
r—Yellow or orange flags required.
s—On vehicles over 45 feet long, rear clearance and marker lamps shall be in combination.
t—One green marker lamp every 10 feet on combinations over 33 feet long.

u—New vehicles shall have double wipers.
v—2 on new vehicles other than truck tractors. No exception for truck tractors in Pennsylvania.
w—New vehicles.
x—Or rear clearance lights required by I.C.C.
y—Trailer and semi-trailers shall have one lamp on front visible from both sides.
z—Clearance and marker lamps may be in combination.
aa—Every vehicle 72 in., or more wide must have 2 amber or clear front, and 2 amber, clear or red rear reflectors. Clearance lamps may be substituted. Reflectors must be approved. Clearance lamps need not be approved.
bb—Plus two auxiliary passing lamps.
dd—On interstate buses—green lights adjacent to destination sign or near upper corners;
On intrastate buses—purple lights in same locations.
ee—Double wipers required on all school buses.
ff—Two yellow stop lamps required on all buses.
gg—If originally equipped with two, both must be operative.
hh—Two reflectors also required on front—reflectorized material extending breadth of vehicle may be substituted.
ii—Clearance and marker lamps may be in combination. When in combination there must be one such lamp on each side, midway of vehicle.
kk—Permits tinted other than red.
xx—Fog lamps are included within the term "Auxiliary Driving Lamps" and are treated accordingly.
zz—Plus 1 auxiliary passing lamp.

Data Revised to March 10, 1958



TUNG-SOL



DUAL VISION-AIDS

4001 single filament 5 $\frac{3}{4}$ " lamp

4002 double filament mate to 4001

STANDARD 7" VISION-AIDS

5040-S, 5400-S, 5440-S for passenger cars,
trucks and buses. 6 and 12 volts



...First In Headlamps **...First In Flashers** **...Most Complete In** **Miniature Lamps**

Vision-Aid Headlamps

In 1907 Tung-Sol produced the first successful electric headlamp . . . today Tung-Sol Vision-Aid Headlamps—both standard 7" and new 5¾" duals—enjoy an outstanding reputation for rugged, dependable service. They take the toughest road conditions in stride and deliver long, brilliant service. Keep your fleet rolling and reduce replacement costs with Vision-Aid Headlamps.

Signal Flashers

1939 was the year Tung-Sol manufactured the first flasher ever to appear on the American highway. Today—100,000,000 flashers later—every car and truck manufacturer specifies Tung-Sol as initial equipment! Whatever your requirement, there's a Tung-Sol flasher to deliver dependable, lengthy service: direction signal flashers, alternating flashers, external, interior and vehicular disability warning signals.

Miniature Lamps

From bumper to bumper and floor to dome—whatever the application—there's a Tung-Sol miniature lamp that fills the lighting requirement—efficiently, dependably. For both 6 and 12-volt systems.

LAMP DIVISION



TUNG-SOL ELECTRIC INC.

NEWARK 4, NEW JERSEY

SALES OFFICES: Atlanta, Ga.; Columbus, Ohio; Culver City, Calif.; Dallas, Texas; Denver, Colo.; Detroit, Mich.; Irvington, N. J.; Melrose Park, Ill.; Newark, N. J.; Philadelphia, Pa.; Seattle, Wash. Canada: Montreal, P. Q.

SAFETY EQUIPMENT

SAFETY EQUIPMENT

TO BE MOUNTED ON VEHICLES

Jurisdictional Control Over Equipment	HEAD LAMPS		TAIL LAMPS		STOP LAMPS		REAR REFLECTORS		CLEARANCE LAMPS		SIDEMARKER LAMPS		IDENTIFICATION LAMPS		DIRECTION SIGNALS		SIDE REFLECTORS	
	Number	Color	Number	Color	Number	Color	Number	Color	Number	Color	Number	Color	Number	Color	Number	Color	Number	Color
	Must Be Approved		Must Be Approved		Must Be Approved		Must Be Approved		Must Be Approved		Must Be Approved		Must Be Approved		Must Be Approved		Must Be Approved	
I.C.C.	2	NS	2	R	2	R	2	R	2	A	2	A	2	NR	NR		2	A
Ala.	2	W/A	1	R	1	R	2	R	4	W	NR	NR	NR	NR	NS	NS	2	NS
Ariz.	2	W/A	1	R	1	R	2	R	4	A	4	A	NR	NR	4	A	2	A
Ark.	2	NSb	1	R	1	R	1	R	2	G	4m	G	3	G	4q	Ye	4	G
Calif.	2	W/A	2	R	1	R	1	R	4	A	NR	NR	NR	NR	4	A/W	NR	
Colo.	2	W/A	1	R	1	R	2	R	4	A	4	A	NR	NR	4	W/A	4	A
Conn.	2	W/A/Ye	1	R	1	R	1	R	4	A/W	NR	NR	2	dd	4	Ye/A	4	A/W
Del.	2	NSa	1	R	1	R	2	R	2	A	4	A	NR	NR	NS	W/A	4	A
D. of C.	2	NSa	1	R	1	R	2	R	2	A	4	A	NR	NR	4	W/A	4	A
Fla.	2	NSa	1	R	1	R	2	R	2	A	4	A	NR	NR	NS	R/Ye	4	A
Ga.	2	NS	1	R	1	R	2	R	2	A	4	A	NR	NR	NS	NS	4	A
Idaho	2	NSa	1	R	1	R	2	R	2	A	4	A	NR	NR	NS	W/A	4	A
Ill.	2	Ye/AW	1	R	1	R	2	R	2	Ye/A	NS	NS	NS	NS	NS	W/A	4	A
Ind.	2	NSa	1	R	1	R	2	R	2	A	4	A	NR	NR	NS	W/A	4	A
Iowa	2	Wkk	1	R	1	R	2	R	2	Ye/W/A	4	Ye/AW	3	Ye/AW	4	W/A/Te	2	p
Kan.	2	W	1	R	1	R	2	R	2	A	4m	A	3	A	NR	Ye	4	A
Ky.	2	Wkk	1	R	1	R	2	R	2	G/W	NR	NR	NR	NR	NS	NS	NR	
La.	2	NSb	1	R	1	R	NR		2	A	4	A	NS	NR	4	A	NR	
Me.	2	W	1	R	1	R	2	R	2	A/GW	NR	NR	NR	NR	NS		NR	
Mid.	2	Wkk	1	R	1	R	2	R	2	A	4m	A	NR	NR	4	A	NR	
Mass.	2	Ye/AW	1	R	NR		1	R	2	G	NR	NR	NR	NR	NR		NR	
Mich.	2	W	1	R	1	R	2	R	2	A	4	A	NR	NR	4	NS	2	A
Minn.	2	W	1	R	1	R	2	R	2	A/W	4	A/W	NR	NR	4	Ye	NR	
Miss.	2	W	1	R	1	R	2	R	2	A	4	A	NR	NR	4	A	NR	
Mo.	2	W	1	R	1	R	2	R	2	A	4	A	NR	NR	NS	NS	NR	
Mont.	2	W	1	R	1	R	2	R	2	A	4	A	NR	NR	4q	W/A	NR	
Nebr.	2	NSb	1	R	1	R	2	R	2	A/G	NR	NR	NR	NR	NS	NS	NR	
Nev.	2	Wkk	1	R	1	R	2	R	2	A	4	A	NR	NR	NR		2	A
N. H.	2	NSa	1	R	1	R	2	R	2	A	4	A	NR	NR	NS	NS	NR	
N. J.	2	Ye/AW	2	R	2	R	1	R	2	A	NR	NR	NR	NR	4	Ye/A	NR	
N. M.	2	NSa	2	R	2	R	2	R	2	A	4	A	NR	NR	4	A	NR	
N. Y.	2	Ye/W	2	R	2	R	2	R	2	A	4	A	NR	NR	4	W/A	NR	
N. C.	2	NSb	1	R	1	R	2	R	2	A	4	A	NR	NR	4	NS	NR	
N. D.	2	NSb	1	R	1	R	NR		2	A	NR	NR	NR	NR	NS	NS	NR	
Ohio	2	W	1	R	1	R	2	R	2	A	4	A	NR	NR	NS		4	A
Okla.	2	W	1	R	1	R	2	R	2	A	4	A	NR	NR	NS	Ye/A	NR	
Ore.	2	NSb	1	R	1	R	2	R	2	A	4	A	NR	NR	2	A	NR	
Penna.	2	NSa	1	R	1	R	2	R	2	A	4m	A	NR	NR	2	Ye/A	NR	
R. I.	2	A/W	1	R	1	R	2	R	2	A	4	A	NR	NR	4	Ye/A	NR	
S. C.	2	W	1	R	1	R	2	R	2	A	4	A	NR	NR	4	A	NR	
S. D.	2	NSa	1	R	1	R	2	R	2	A	4	A	NR	NR	4	A	NR	
Tenn.	2	NSa	1	R	1	R	2	R	2	A	4	A	NR	NR	NS	NS	NR	
Tex.	2	W	1	R	1	R	2	R	2	A	4	A	NR	NR	4	A	NR	
Utah	2	NSa	1	R	1	R	2	R	2	A	4	A	NR	NR	4q	W/A	NR	
Vt.	2	W/A	1	R	NR		NR		1	G	NR	NR	NR	NR	NR		NR	
Va.	2	W	1	R	1	R	NR		4	A	NR	NR	NR	NR	4	A	NR	
Wash.	2	NSa	2	R	2	R	2	R	2	A	4	A	NR	NR	4	W/A	NR	
W. Va.	2	NSa	1	R	1	R	2	R	2	A	4	A	NR	NR	NS	RA/Ye	NR	
Wisc.	2	W	1	R	1	R	2	R	2	A	NR	NR	NR	NR	4q	W/A	NR	
Wyo.	2	NSa	1	R	1	R	2	R	2	A	4	A	NR	NR	NS	W/A	NR	

REQUIRED															PERMITTED																			
TO BE CARRIED IN VEHICLES															TO BE MOUNTED																			
REAR VIEW MIRROR		WINDSHIELD WIPERS		DEFROSTERS		FIRE EXTINGUISHERS		LIQUID BURNING FLARES		ELECTRIC FLARES		REFLECTOR FLARES		FUSES		RED CLOTH FLAGS		LIGHT OR FLAG ON PROJECTING LOAD		AUXILIARY DRIVING LAMPS			FOG LAMPS			SPOT LAMPS			Driving Lights Permitted At One Time		Jurisdictional Control Over Equipment			
Number	Must Be Approved	Number	Must Be Approved	Number	Must Be Approved	Number	Must Be Approved	Number	Must Be Approved	Number	Must Be Approved	Number	Must Be Approved	Number	Must Be Approved	Number	Must Be Approved	Number	Must Be Approved	Number	Must Be Approved	Number	Must Be Approved	Number	Must Be Approved	Number	Must Be Approved	Number	Must Be Approved	Number	Must Be Approved	Number	Must Be Approved	
2	*	2	*	1	*	1/2	*	3	*	3	R	*	3	R	*	3	NS	15	2	12	1	12	NSM		NSM		NSM			4		I.C.C.		
1	N	1	N	NR	NR	1	Y	3	Y	3	R	Y	3	R	Y	3	R	NS	2	12	1	12	2	NS	Y	2	NS	Y	1	NS	Y	NS	Ala.	
1	N	1	N	NR	NR	1	Y	3	Y	3	R	N	3	R	Y	3	R	15	2	12	1	12	2	bb	NSa	Y	2	NS	Y	1	NSa	Y	4	Ariz.
1	N	1u	N	1†	N	1	Y	2	N	2	R	N	2	R	Y	NR	NR						3	NSa	Y	XX			1	NSa	Y	4	Ark.	
1	N	1	N	1†	N	1	Y	3	Y	3	R	Y	3	R	Y	3	R	20	3	NS	1	12	2bb	A/W	Y	2	A/W	Y	2	NS	Y	4	Calif.	
1	N	1	N	1†	N	1	N	3n	Y	3n	R	Y	3n	R	Y	3n	R	NS	NR				2	NS	Y	2	NS	Y	2	NS	Y	4	Colo.	
1	N	1	N	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR						2	A/W	N	XX			1	A/W	N	4	Conn.	
1	N	2	N	NR	NR	1	N	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR						1zz	NSa	N	2	NSa	N	2	NSa	N	4	Del.	
1	N	1	N	1†	N	1	Y	3	Y	3	R	Y	3	R	3	R	15	2	12	1	16	3	NSa	N	NSM			1	NSa	N	NS	Fla.		
1	N	1	N	1†	N	1	Y	3	N	3	R	N	3	R	N	3	R	15	2	12	1	12	2	NS	N	2	NS	N	1	NSa	N	NS	Ga.	
1	N	2	N	1†	N	1	Y	3	Y	3	R	Y	3	R	Y	3	R	NS	2	12	1	16	2bb	NSa	Y	2	NSa	Y	2	NSa	Y	4	Idaho	
1	N	1	N	NR	NR	2	N	3	Y	3	R	Y	3	R	Y	NR	3	NS	1	16	3	NS	N	XX			1	NS	N	4	Ill.			
1	N	1	N	NR	NR	3	Y	3	Y	3	R	Y	3	R	Y	3	R	15	2	12	1	12	1zz	NS	N	2	NS	N	2	NSa	N	4	Ind.	
1	N	1	N	NR	NR	2	Y	3	Y	3	R	Y	3	R	Y	1	NS	NS	3	NS	1	16	3	NSa	Y	XX			1	NSa	Y	4	Iowa	
1	Y	1	N	1†	N	2	N	3	Y	3	R	Y	3	R	Y	3	R	15	3	15	2	12	3	A/W	Y	XX			1	W	N	4	Kan.	
1	N	1	N	NR	NR	1	Y	3	Y	3	R	Y	3	R	Y	3	R	15	NR				NSM		NSM		NSM				NS	Ky.		
1	N	1	N	1†	N	1	Y	3	N	3	R	N	3	R	Y	NR	2	12	1	12	2	NSa	Y	XX								La		
1	N	1	N	NR	NR	2	Y	3	Y	3	R	Y	3	R	Y	NR	NR						2	A/W	Y	XX			1	NS	N	NS	Me.	
1	N	1	N	NR	NR	1	Y	3	Y	3	R	Y	3	R	Y	NR	NR						3	NSa	Y	XX			1	NSa	N	4	Mid.	
1	N	1u	N	1	N	1	N	3	Y	3	R	Y	3	R	Y	3	R	15	2	12	1	12	NSM		NSM				1	NSa	Y	NS	Mass.	
1	N	1	N	1†	N	1	Y	3	Y	3	R	Y	3	R	Y	NR	3r	24	1	12	4	A/W	Y	XX			2	A/W	N	NS	Mich.			
1	N	1	N	1†	N	1	Y	3	Y	3	R	Y	3	R	Y	3	R	15	NR				2	NS	Y	XX			1	NS	N	4	Minn.	
1	N	1	N	1†	N	1	Y	3	Y	3	R	Y	3	R	Y	3	R	15	NR				2	NS	Y	XX			1	NS	N	4	Miss.	
1	N	1	N	1†	N	1	Y	3	N	3	R	N	3	R	N	3	R	15	2	NS	1	16	3	Ye/AW	N	XX			1	Ye/AW	N	4	Mo.	
1	N	1	N	NR	NR	1	N	3	Y	NR	3	R	Y	NR	2	NS	1	16	2	NSb	Y	NSM						2	NS	N	4	Mont.		
1	N	1	N	1†	N	1	Y	3	Y	3	R	Y	NSM	3	R	15	2	12	1	12	3	NS	N	XX			1	NS	N	4	Nabr.			
1	N	1	N	1	N	1	Y	2	Y	2	R	Y	2	R	Y	2	R	20	NR				3	NS	Y	2	A	Y	2	NS	Y	4	N. H.	
1	N	1	N	NR	NR	1	Y	3	Y	3	R	Y	3	R	Y	NR	NR						2	A/W	Y	XX			1	NSa	Y	4	N. J.	
1	N	1	N	1†	N	1	Y	3	Y	3	R	Y	3	R	Y	3	R	15	2	12	1	12	2	NSa	Y	2	NSa	Y	2	NSa	Y	4	N. M.	
1	N	1	Y	NR	NR	2	Y	2	N	2	R	N	NP	2	R	NS	2	12	1	12	NSM		NSM		NSM							N. Y.		
1	N	1	N	NR	NR	1	N	3	Y	3	R	Y	3	R	Y	3	R	15	2	12	1	12	2	NS	N	XX			2	NS	Y	NS	N. C.	
1	N	1	N	NR	NR	2	Y	3	Y	3	R	Y	NP	3	R	15	2	12	1	16	3	W	N	NS	Ye/AW	N	1	W	N	8	N. D.			
1	N	1	N	1†	N	1	Y	3	Y	3	R	Y	3	R	Y	3	R	15	3	12	1	12	2	NSa	Y	XX			2	NSa	Y	4	Ohio	
1	N	1	N	NR	NR	1	Y	3	N	3	R	N	3	R	Y	NR	3	12	1	12	3	NSa	Y	XX			1	NS	Y	4	Ore.			
1	N	1	N	NR	NR	1	N	3	Y	3	R	Y	3	R	Y	NR	3	12	1	12	3	W	Y	2	A/W	Y	1	NS	N	4	Penna.			
1	N	1	N	1†	N	1	Y	3	Y	3	R	Y	3	R	Y	3	R	15	2	12	1	12	2	A/W	Y	XX			2	NS	Y	4	R. I.	
1	N	NR	NR	NR	NR	1	N	3	Y	3	R	Y	3	R	Y	NR	NR						3	NS	Y	XX			1	NS	N	NS	S. C.	
1	N	1	N	1†	N	1	Y	3	Y	3	R	Y	3	R	Y	3	R	15	2	12	1	12	2	NS	N	XX			2	NSa	N	4	Tenn.	
1	N	NR	NR	NR	NR	1	N	2	Y	3	Y	3	R	Y	3	R	15	2	12	1	12	3	NS	Y	XX			1	NS	Y	4	Tex.		
1	N	1	N	1†	N	1	Y	3	Y	3	R	Y	3	R	Y	3	R	15	2	12	1	12	NSM		NSM		NSM						Utah	
1	Y	1u	Y	NR	NR	1	Y	3	Y	3	R	Y	3	R	Y	NR	2	12	1	12	2	NS	Y	2	A/W	Y	2	W	Y	4	Va.			
1	N	2	N	NR	NR	1	Y	3	Y	3	R	Y	3	R	Y	3	R	15	2	12	1	12	1zz	NSa	Y	2	NSa	Y	1	NS	Y	4	W. Va.	
1	N	1	N	1†	N	1	Y	3	Y	3	R	Y	3	R	Y	3	R	15	2	12	1	12	2	NSa	Y	2	NSa	Y	1	NS	Y	4	Wisc.	
1	N	1	N	NR	NR	1	Y	3	Y	3	R	Y	NP	3	R	NS	2	12	1	12	NS	W/A	N	2	W/A	N	2	W/A	N	4	Wyo.			
1	N	1	N	1†	N	1	Y	3	Y	3	R	Y	3	R	Y	3	R	15	2	12	1	12	1zz	NSa	Y	2	NSa	Y	2	NSa	Y	4	Wyo.	



Will Yankee safety accessories really lower your cost-per-mile?

Gas prices...state taxes...rising maintenance costs...rugged competition from the railroads...increased over-the-road competition...and less business overall to fight for.

More than ever before these are the times when you must figure your costs with a mighty sharp pencil.

"OK," you say, "but how can a firm that makes mirrors and lighting equipment provide us with meaningful savings when these products represent only a

small part of our total overhead?"

Well, we haven't invented a heavy-duty mirror that sells for \$1.00—or an 89¢ directional signal set. But we have proved to thousands of fleets that over the long pull Yankee signals, lamps, mirrors, clearance lights take more hard knocks, look better, need fewer replacements than any other fleet safety accessories. On one truck it may represent a saving of only \$1.00 per week. But when multiplied by 25 or 100 or 300 vehicles these Yankee savings mount up.

Let's look at just three of the Yankee heavy-duty manufacturing procedures that make these savings possible:

1. BONDERIZATION: *This process seals the paint to the metal so it won't chip, powder or flake.*

2. ORIGINAL EQUIPMENT MOUNTING: *Mounting holes standardized for your lowest installation costs anywhere.*

3. FULLY REPLACEABLE PARTS: *A mirror head, (even the mirror glass) a pigtail, a lamp reflector, a lens—with Yankee you don't have to replace an entire unit (in the rare event that it is damaged), just replace the inexpensive component. Savings like this add up.*

Will Yankee heavy-duty safety accessories really lower your cost-per-ton-mile? Don't take our word for it. See our complete line of over 350 individual safety products for trucks at your nearest Yankee jobber. Or write, Yankee Metal Products Corporation, Norwalk, Connecticut, for our 18 page illustrated fleet catalog.



lamps • mirrors • signals • emergency equipment

NOTE: If you operate passenger cars and smaller delivery pickups, examine Yankee's famous chrome mirror line.

VEHICLE INSPECTION LAWS

THE chart below spells out highlights of the basic provisions in states and cities requiring vehicle inspection. It is presented primarily for the benefit of fleet operators who have or who contemplate having vehicles registered in "foreign states

or cities." After noting the basic provisions, refer to the notes below.

Although subject to local variation, the American Assn. of Motor Vehicle Administrators and the Assn. of Casualty and Surety Companies are sponsors of a generally accepted

standard for vehicle inspection. If you'd like a copy, write American Standards Assn., 70 East 45th St., New York 17, N. Y. Ask for "American Standard Inspection Requirements for Motor Vehicles, D7.1-1956." The price is \$1 per copy.

Reference Notes

Note 1. Semi-annually—Apr.-May and Oct.-Nov. Fee is not more than \$1.50.

Note 2. Annually, during three months prior to expiration of registration.

Note 3. In Illinois all trucks must be inspected and secure a "certificate of safety" prior to registration and semi-annually thereafter.

Note 4. Trucks and buses, except those subject to ICC safety requirements and buses subject to Illinois Commerce Commission safety and inspection requirements.

Note 5. Brakes, lights, horns, reflectors, mufflers, rear vision mirrors, safety chains, frame, axles, cab, body, wheels, steering apparatus, safety devices.

Note 6. Semi-annually — Apr. and Oct. except Cook County where period is Mar.-May and Sept.-Nov. Fee is \$1.00 or more, usually \$1.00 per axle.

Note 7. Brakes, lights, horn, muffler, steering gear, windshield, windshield cleaner, number plates and rear windows.

Note 8. Brakes, lighting equipment, steering mechanism, horns, mirrors, windshield wipers and other equipment.

Note 9. Annually or semi-annually.

Note 10. Mechanism, brakes and equipment.

Note 11. At least twice, but not more than three times per year.

Note 12. Motor vehicles and trailers over 4 years old, and all used vehicles when transferred.

Note 13. Brakes, lights, steering, wheel alignment, and other equipment.

Note 14. Motor vehicles, trailers and semi's, except trailers and semi's

	VEHICLES AFFECTED	EQUIPMENT INSPECTED	METHOD	FREQUENCY	FEE
STATES					
Colorado	All	All	Authorized stations	Note 1	Note 1
Delaware	All	All	State inspectors	Note 2	None
District of Columbia	All	All	District inspectors	Annually	\$1.00
Illinois, Note 3	Note 4	Note 5	Authorized stations	Note 6	Note 6
Massachusetts	All	All	Authorized stations	April, Oct.	50¢
Mississippi	All	Note 7	Authorized stations	April, Oct.	50¢
New Hampshire	All	Note 8	Authorized stations	May, Oct.	\$1.00
New Jersey	All	Note 10	State inspectors	Note 26	\$1.00
New Mexico	All	Note 10	Authorized stations	Note 11	\$1.00
New York	Note 12	Note 13	Authorized stations	Annually	Note 27
Pennsylvania	Note 14	Note 15	Authorized stations	Note 16	Note 17
Rhode Island	Note 18		Authorized stations	Note 19	\$2.00
Texas	Note 20	Note 21	Authorized stations	Annually	\$1.00
Utah	All	All	Authorized stations	Note 22	50¢
Vermont	All		Authorized stations	May, Oct.	\$1.00
Virginia	All	Note 23	Authorized stations	Note 24	50¢
West Virginia	All	Note 10	Authorized stations	Note 25	\$1.25
CITIES					
Chicago, Ill.			City inspection stations	Annually	None
Evanston, Ill.			City inspection stations	Semi-annually	None
Springfield, Ill.			Authorized stations	Semi-annually	50¢
Des Moines, Iowa			City inspection stations	Note 28	50¢
Omaha, Neb.			City inspection stations		
Cincinnati, Ohio			City testing stations		
Memphis, Tenn.			City testing stations	3 per year	

of less than 1000 lb chassis and body weight.

Note 15. Steering mechanism, brakes, lights, horns, warning devices, mirrors, windshield wipers.

Note 16. Passenger cars: May 1-July 31, Nov. 1-Jan. 31; Commercial vehicles: Aug 1-Oct. 31, Feb. 1-April 30.

Note 17. Not set by law. Usually \$1.00 to \$1.50.

Note 18. For-hire taxicabs, buses, jitneys.

Note 19. Before registration, then periodically.

Note 20. All vehicles except: trailers and semi's with gross weight of 4000 lb or less; farm machinery, tractors, and trailers; vehicles of fac-

tory model 1935 and earlier if not driven on federal or state highways.

Note 21. Brakes, lighting equipment, horns, warning devices, mirrors and windshield wipers.

Note 22. During May and October, dates set by Road Commission.

Note 23. Mechanism and equipment.

Note 24. Semi-annually, between May 1 and June 15 and between October 1 and November 15.

Note 25. Annually, between July 1 and September 30.

Note 26. Semi-annually. Temporarily reduced to annually until inspection station congestion is relieved.

Note 27. Subject to approval by Commissioner.

Note 28. Annually or semi-annually.

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PURE's SPOT CHECK OIL ANALYSIS gives you a fast, on-the-job report of engine oil condition. Helps stop trouble before it starts.



PURE's LABORATORY USED OIL ANALYSIS provides you with a full report on engine condition, helps cut repair and maintenance costs.



PURE OIL's PREVENTIVE MAINTENANCE PLAN keeps tabs on mileage, oil changes. Gives you the most from your trucks at lowest cost.

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Hot showers are a big attraction at many of PURE's 176 truck stops. It's just part of the guest treatment drivers get at PURE.



We know that good food on the road helps keep drivers happy. And most of them say meals at PURE are about the best they find anywhere.



A comfortable sofa and a magazine let your driver take his mind off the long hours on the road. Later, he might watch TV.

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Address.....

City.....Zone.....State.....

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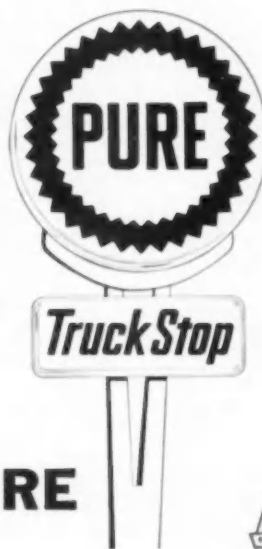
over the road!



While your driver sleeps soundly, his rig will be gassed up, greased and safety checked by expert mechanics on duty round the clock.



Pure TruckStops are located on key truck routes throughout PURE's 24-state marketing area. They're happy sights for all truck drivers.



BE SURE WITH PURE



MUD GUARD REQUIREMENTS

MUD GUARD provisions are included in the motor vehicle requirements of 25 states. States and their requirements are charted below.

In general, the basic requirement is that rear wheels must be protected at the top and rear by the vehicle's body or by metal protectors, flexible flaps, or some other protective means which will minimize spray or splash to the rear, and which are at least as wide as the tires they protect.

These general requirements are referred to in the chart as "Basic." Additional state requirements are listed in the notes below. It should be noted that there are some minor variations even in the basic requirements from state to state.

Under the heading "Vehicles Affected," the word "All" includes trucks, tractors, trailers, semi-trailers, pole trailers and buses.

State	Vehicles Affected	Requirements	Exemptions	State	Vehicles Affected	Requirements	Exemptions
Cal.	All over 1500 lb net weight	Basic	None	N. Y.	All	Basic. See Note 12.	None
Conn.	All over 3 tons GVW	Basic	Farm Vehicles. Others requiring complete wheel freedom.	Ohio	All over 3-tons GVW	Basic. See Note 4.	None
Ga.	All	Basic. See Note 1.	None	Okla.	All	Basic	Animal-drawn vehicles and farm tractors
Idaho	All	Basic. See Note 6.	None	Ore.	All	Basic. See Note 6.	Truck chassis not equipped for hauling a load. Truck, trailer or semi-trailer equipped with bunks
Ill.	Trucks, trailers, semis	Basic. See Note 2.	See Note 2.	Pa.	All commercial vehicles	Basic. See Note 7.	None
Maine	Trucks, trailers, semis	Basic	Trucks under 7-ton GVW, dump trucks, truck-tractors	R. I.	All	Basic	Vehicles requiring complete wheel freedom
Mass.	All	Basic	None	Tenn.	All with carrying capacity of over 3000 lb	Basic, as approved	Farm vehicles. Vehicles used exclusively for hauling logs
Mich.	Trucks, trailers, semis	Basic. See Note 3.	None	Texas	Vehicles with 4 or more tires on rear axle operated on wet highways	Basic. See Note 9.	Pole trailers
Minn.	Trucks, trailers, semis	Basic. See Note 4.	Pole trailers. Rear end dump trucks	Utah	All commercial vehicles	Basic. See Note 10.	Buses
Miss.	All over 10-tons GVW	Basic. See Note 5.	Pole trailers, dump trucks and trucks carrying an "F" license	Va.	All with carrying capacity over 22,500 lb	Basic, as approved	Vehicles used exclusively for hauling logs
Neb.	All new vehicles purchased after Jan. 1, 1956	Basic	None	Wash.	All	Basic	None
N. H.	All	Basic, as approved	None	Wisc.	Truck-tractors and inter-city trucks and semi-trailers	Basic. See Note 11.	Vehicles equipped with dump bodies
N. J.	All over 3 tons, gross	Basic, as approved	Pole trailers, dump trucks, tanks, and vehicles requiring complete wheel freedom				

Reference Notes

Note 1. Ground clearance under any loading conditions must not be more than $\frac{1}{2}$ of the distance from center of rearmost axle to center of flaps.

Note 2. Illinois contour mudflap law as described here has been held unconstitutional by the Circuit Court of Sangamon County. In another action, a three-judge District Court has enjoined its enforcement. Ground clearance must be 10 in. when loaded to maximum legal capacity. Flaps may be of flexible or rigid material; must parallel tread surface through top rear quarter of tires (or to within 2 in. of body if clearance between body and tires is less than 5 in.); must be as wide as tires and must be mounted within 6 in. of tire (when fully loaded), and have lip or flange on outside edge extending at least 2 in. below flap bottom surface. Flaps on vehicle purchased before Aug. 1, 1957, must meet specifications after Jan. 1, 1958. Exemptions include in-transit vehicles capable only of using temporary splash guards approved by state police, 2-axle farm vehicles, pole trailers, dump trucks, cement mixer trucks, grain trucks, construction and drilling equipment, and vehicles operated mainly within municipalities or adjacent areas. Department of Public Safety may require non-contour flaps on exempted vehicles.

Note 3. Guards must bar water or other road surface substances thrown from the rear wheels at tangents exceeding $22\frac{1}{2}$ deg measured from the road surface. If flap type device is used, it must not have attached any

type of lamp, reflective material or reflecting buttons, nor can the device extend beyond the maximum width limit of the vehicle.

Note 4. Ground clearance cannot be more than $\frac{1}{2}$ of the horizontal distance from the center of the rearmost axle to the flap under any conditions of loading or operation and must be at least as wide as the tires. If rear wheels are not covered at the top by fenders, protective means must extend at least to the center of the rearmost axle.

Note 5. Ground clearance cannot be more than $\frac{1}{2}$ of the distance from the center of the rearmost axle to the center of the flaps under any conditions of loading. Commissioner of Public Safety may exempt vehicles whose design and construction are such that the purposes of the act cannot be met. If rear wheels are not covered at top, flaps must extend to a point directly above the rearmost axle. Lamps or wiring must not be attached to protectors or flaps.

Note 6. Trucks equipped with a body and buses, bus trailers, semitrailers and trailers must have the rear wheels guarded from a point above and forward of the center of the tire over and to the rear of the wheel to a point not more than 10 in. above the highway surface when the vehicle is empty. Trucks not equipped with bodies must have guards behind the rear wheels downward from a point not lower than halfway between the center of the wheels and the top of the tires on such wheels to a point not more than 10 in. from the highway surface when the vehicle is empty. All other motor vehicles must have guards behind all wheels, from a point above

and forward of the center of the tire over and to the rear of the wheel to a point not more than 20 in. above the highway surface.

Note 7. Device must bar water and other road surface substances thrown from the rear wheels at tangents exceeding $22\frac{1}{2}$ deg measured from the road surface and passing in a straight line to the rear of the vehicle.

Note 8. Ground clearance cannot be greater than $\frac{1}{2}$ the horizontal distance from the center of the axle to the flap. Devices must be of a type approved by the Commissioner of Safety. Lamps, wiring or reflectorized material must not be attached to the flaps.

Note 9. Guards or flaps must extend to within 6 in. of the highway surface and must be of approved type.

Note 10. Ground clearance cannot be more than $\frac{1}{2}$ of the diameter of the rear axle wheel or not more than $\frac{1}{2}$ of the distance from the center of the axle to the flap under any condition of loading. If rear wheels are not covered at the top, the protective means must extend to at least the center line of the rearmost axle.

Note 11. Ground clearance cannot be more than $\frac{1}{2}$ of the horizontal distance from the center of the rearmost axle to the flap under any conditions of loading or operation; and must be at least as wide as the tires. If rear wheels are not covered at top by fenders, protective means must extend at least to the center of the rearmost axle.

Note 12. Must be substantial and reasonably flexible. Ground clearance may not exceed $\frac{1}{2}$ of horizontal distance from flap to point of contact of wheel with ground.

STATE TAX GUIDE

FLEET groupings considered in this guide are . . .

1. Trucks
 - a. For-hire
 - (1) Common carrier
 - (2) Contract carrier
 - b. Private
2. Buses
 - a. Common carrier
 - b. Charter

Unless otherwise indicated as applying to one or more of the above groups, the taxes and fees listed are levied on all types of fleets. Note: Space does not permit listing of exceptions to the taxes, such as certain weight classes or a particular type of carrier (for example: household goods), so you may find you are exempt from some of the taxes listed as applying to your general grouping.

ALABAMA — Ad Valorem Tax, Sales and Use Tax, Gasoline Tax, Use Fuel Tax, Registration Fee, Operating Authority Certificate Fee and Vehicle Plates (except private trucks), Seat-Mile Tax (buses only), Axle-Mile Tax (for-hire trucks only), Trip Permit Fee (for-hire trucks only).

ARIZONA — Uniform Auto Liev Tax, Privilege (sales) Tax, Gasoline Tax, Use Fuel Tax, Registration Fee, Operating Authority Certificate Fee and Vehicle Plates (except private trucks), License (gross receipts) Tax (except private trucks), Gross Income (sales) Tax (private trucks only).

ARKANSAS — Personal Property Tax, Sales Tax, Fuel Tax, Certificate of Registration Fee, Certificate of Title Fee, Registration Fee, Operating Authority Certificate Fee and Vehicle Plates (except private trucks).

CALIFORNIA — Sales and Use Tax, Gasoline Tax, Use Fuel Tax, Registration (Primary, Weight and License) Fees, Operating Authority Fee (except private trucks), Gross Receipts Tax (except private trucks), Pro-Rata Registration, Trip Permit Fee.

COLORADO — Specific Ownership Tax, Sales and Use Tax, Fuel Tax, Registration Fee, Operating Authority Fee, Mileage Tax, Pro-Rata Registration, Trip Permit Fee.

CONNECTICUT — Sales and Use Tax, Gasoline Tax, Special Fuels Tax, Fuel Use Tax, Registration Fee, Excise (income) Tax (intrastate buses only), Gross Receipts Tax (interstate buses only), Operating Authority Certificate Fee and Vehicle Plates (for-hire trucks only), Pro-Rata Registration (common carrier buses only).

DELAWARE — Gasoline Tax, Diesel

Fuel Tax, Registration Fee, Occupational Tax (buses only).

DISTRICT OF COLUMBIA — Fuel Tax, Vehicle Inspection Fee, Certificate of Title Fee, Excise (or Titling) Tax, Registration Fee, License (mileage tax) Fee (common carrier buses only), License Tax (for-hire trucks and charter buses only).

FLORIDA — Sales and Use Tax, Gasoline Tax, Special Fuel Tax, Registration Fee, Operating Authority Certificate Fee (except private trucks), Operating Authority Vehicle Plates (for-hire trucks only), Mileage Tax (except private trucks), Optional (in lieu of registration fee) Mileage Tax (except private trucks).

GEORGIA — Personal Property Tax, Sales and Use Tax, Fuel Tax, Fuel Use Tax, Registration Fee, Operating Authority Certificate Fee and Carrier Registration Tax (except private trucks), Highway Use Permit Fee (except buses), Round Trip (retaliatory tax) Fee (except buses), Pro-Rata Registration (buses only).

IDAHO — Gasoline Tax, Special Fuel Tax, Registration Fee, Use (weight-distance tax) Fee, Operating Authority Fee (except private trucks), PUC Administrative (gross receipts tax) Fee, Trip Permit Fee.

ILLINOIS — Sales and Use Tax, Fuel Tax, Vehicle License Fee, Registration (Flat Weight Fees or Alternative Mileage Tax) Fees, Operating Authority Initial Application Fee and Annual Renewal Fee (for-hire trucks only), Pro-Rata Registration.

INDIANA — Gasoline Tax, Special Fuels Tax, Certificate of Title Fee, Registration Fee, Operating Authority Certificate Fee (except private trucks), PSC Vehicle Registration Fee (except private trucks), Gross Income (gross receipts) Tax (except private trucks).

IOWA — Use or Sales Tax, Gasoline Tax, Special Fuel Tax, Fuel Use Tax, Registration Fee, Carriers Compensation Tax (buses and common carrier trucks only), Operating Authority Fee (except private trucks), Pro-Rata Registration (except private trucks), Trip Permit Fee (buses and common carrier trucks only).

KANSAS — Personal Property Tax, Sales or Use Tax, Gasoline Tax, Special Fuels Tax, Fuel Use Tax, Certificate of Title Fee, Registration Fee, Operating Authority Fee, Regulatory Fee, Pro-Rata Registration, Trip Permit Fee.

KENTUCKY — Personal Property Tax, Usage Tax, Gasoline Tax, Special

Fuels Tax, Fuel Use Tax, Registration Fee (except buses), Seat (registration) Fee (buses only), Mileage Tax (buses only), Operating Authority Fee and Vehicle Cab Cards (except private trucks), Excise Tax (for-hire trucks only).

LOUISIANA — Sales Tax, Gasoline Tax, Use Fuel Tax, Lube Oil Tax, Registration Fee, Operating Authority Certificate Fee and Vehicle Permits (except private trucks), Inspection and Supervision (gross receipts) Fee (for-hire trucks and common carrier buses only), Public Utility License (gross receipts) Tax (for-hire trucks only).

MAINE — Sales and Use Tax, Gasoline Tax, Use Fuel Tax, Fuel Use Tax, Vehicle Excise Tax, Personal Property Tax, Registration Fee, Operating Authority (per vehicle) Fee (common carrier buses only), Operating Authority Certificate Fee and Vehicle Permits (for-hire trucks only).

MARYLAND — Excise Tax, Certificate of Title Fee, Gasoline Tax, Special Motor Fuels Tax, Fuel Use Tax, Registration Fee (except common carrier buses), Seat-Mile Tax (common carrier buses only).

MASSACHUSETTS — Motor Vehicle Excise Tax, Gasoline Tax, Use Fuel Tax, Registration Fee, Operating Authority Application Fee and Vehicle Permits (for-hire trucks and common carrier buses only).

MICHIGAN — Sales and Use Tax, Gasoline Tax, Diesel Fuel Tax, Registration Fee, Operating Authority Fee (except private trucks), Privilege (mileage tax) Fee (except private trucks).

MINNESOTA — Gasoline Tax, Use Fuel Tax, Registration Fee, Operating Authority Certificate Fee and Identification Plate Fees (except private carriers), Pro-Rata Registration (buses only).

MISSISSIPPI — Personal Property Tax, Sales and Use Tax, Gasoline Tax, Use Fuel Tax, Registration (License Plate Fee and Privilege Taxes) Fees, Mileage Tax (private trucks only), Operating Authority Fee (except private trucks), Annual Vehicle Inspection Fee (except private trucks), Vehicle Identification Plate Fee (except private trucks), Sales (gross receipts) Tax (except private trucks), Trip Permit Fee (except private trucks).

MISSOURI — Personal Property Tax, Sales Tax, Certificate of Title
(TURN TO PAGE 208, PLEASE)

To guarantee optimum



**J-M Four-Star
Brake Blocks are
identified by these colors:**

Style No. 2500

Colored red to denote
high friction range



Style No. 2100

Colored green to denote
low friction range



Style No. 2300

Colored yellow to denote
medium friction range



JOHNS-MANVILLE

brake performance, use . . .

J-M "Color-Coded" Brake Blocks

New J-M Brake Advisory Service promises
Fleet Operators maximum mileage at minimum cost

Here's a packaged maintenance program you can adopt immediately to help cut costs and get better brake performance at the same time.

It's the Johns-Manville Brake Advisory Service . . . a plan especially designed for Fleet operators. It embraces a study of your operation by field sales engineers, a recommendation of materials carefully selected on the basis of analysis of the problem, and, foolproof schematic color sketches to guide your mechanics in following the specific recommendations you will receive for each vehicle.

How the plan works

Here is the easy way to make sure that the Brake Blocks you use are *correct* for every vehicle in your fleet:

Just call on the J-M Advisory Service. Through this free service, J-M Engineers are available to study your particular operation and prepare brake block specifications based on the exact needs of each vehicle.

In this way you'll get quality blocks that deliver consistently uniform friction *balance* on all four wheels. That means you'll get longest wear, and lowest total costs per mile. In addition, you can expect less damage to drums . . . fewer road calls.

To implement this program

Johns-Manville Brake Blocks are now color-coded for two important reasons. First, to designate medium, high, or low friction level as selected for optimum performance. Second, to provide instant identification by mechanics and thus insure correct application in accordance with J-M's recommendations.

Don't overlook this opportunity to make important reductions in drum wear—minimize braking expense—step up vehicle performance. Write or call Johns-Manville Brake Advisory Service, Box 14, N. Y., 16, N. Y. In Canada, Port Credit, Ont.



Invite this
J-M Expert

to offer his expert advice on a sound program designed to achieve greater efficiency and operating economy for each vehicle in your fleet. His services are free. Write Johns-Manville Brake Advisory Service at address above.

BRAKE BLOCKS

State Tax Guide

Continued from Page 205

Fee, Gasoline Tax, Special Fuels Tax, Registration Fee, Operating Authority Certificate Fee (except private trucks).

MONTANA—Personal Property Tax, Gasoline Tax, Special Fuels Tax, Fuel Use Tax, Registration Fee, Gross Vehicle Weight Tax, trucks only), Seat Tax (buses only), Operating Authority Fees (except private trucks), Highway Compensation (per vehicle) Fee (except private trucks), Gross Revenue Tax (except private trucks), Pro-Rata Registration.

NEBRASKA—Personal Property Tax, Certificate of Title Fee, Gasoline Tax, Use Fuel Tax, Registration Fee, Operating Authority Fee and Administrative (per vehicle) Fees (except private trucks), Retaliatory Tax.

NEVADA—Personal Property Tax, Sales and Use Tax, Gasoline Tax, Use Fuel Tax, Registration Fee, License Tax (except private trucks), Alternative (in lieu of License Tax) Mileage Tax (for-hire trucks only), Pro-Rata Registration, Trip Permit Fee.

NEW HAMPSHIRE—Gasoline Tax, Special Fuels Tax, Registration Fee, Annual PSC Vehicle Registration Fee (buses only), Operating Authority Certificate and Vehicle Plate Fees (for-hire trucks only), Retaliatory Tax.

NEW JERSEY—Fuel Tax, Registration Fee, Municipal Franchise (gross receipts) Tax (common carrier buses only), Mileage Tax (buses only).

NEW MEXICO—Excise (sales) Tax, Gasoline Tax, Special Fuels Tax, Registration Fee, Operating Authority Certificate Fee (except private trucks), Annual Equipment List (per vehicle) Fee (except private trucks), Gross Income (gross receipts) Tax (except private trucks), Port of Entry (mileage) Tax (except private trucks), Pro-Rata Registration.

NEW YORK—Gasoline Tax, Diesel Fuel Tax, Registration Fee, Operating Authority Certificate Fee except private trucks), Truck Mileage Tax (for-hire trucks only).

NORTH CAROLINA—Sales and Use Tax, Certificate of Title Fee, Gasoline Tax, Special Fuels Tax, Fuel Use Tax, Registration Fee (except common carrier trucks and buses), Registration (Vehicle License Tax and Gross Receipts Tax) Fees (common carrier trucks and buses only), Operating Authority Certificate Fee and Equipment Registration Fees (except private trucks), Trip Permit Fee.

(Note: Common carrier trucks may elect to pay contract carrier truck Registration Fee in lieu of combination License Tax and Gross Receipts Tax.)

NORTH DAKOTA—Sales Tax or Motor Vehicle Excise Tax, Certificate of Title Fee, Gasoline Tax, Special Fuels Tax, Registration Fee, Non-Resident Mileage Tax (except buses), Operating Authority Fee (except private trucks), Vehicle Identification Tag Fees (for-hire trucks only), Pro-Rata Registration.

OHIO—Sales and Use Tax, Special Fuels Tax, Registration Fee, Highway Use (axle-mile) Tax (except buses), Annual Capacity (per vehicle) Fee (except private trucks).

OKLAHOMA—Excise (sales), Tax, Gasoline Tax, Special Fuel Use Tax, Fuel Use Tax, Registration Fee, Operating Authority Certificate Fee and Vehicle Identification Plate Fees (except private trucks), Mileage Tax (common carrier buses only), Pro-Rata Registration (buses only).

OREGON—Gasoline Tax, Use Fuel Tax, Registration Fee, Transportation (mileage) Tax, Operating Authority Certificate Fee and Vehicle Identification Plate Fees, Pro-Rata Registration.

PENNSYLVANIA—Sales and Use Tax, Certificate of Title Fee, Gasoline Tax, Use Fuel Tax, Registration Fee, Operating Authority Fee (except private trucks), Excise (gross receipts) Tax (except private trucks).

RHODE ISLAND—Sales Tax, Gasoline Tax, Registration Fee, Operating Authority Fee (common carrier buses only), Operating Authority Fee and Vehicle Plate Fees (for-hire trucks only).

SOUTH CAROLINA—Sales and Use Tax, Gasoline Tax, Special Fuels Tax, Fuel Use Tax, Registration Fee, Vehicle License Fee (except private trucks).

SOUTH DAKOTA—License (sales) Tax, Certificate of Title Fee, Gasoline Tax, Special Fuels Tax, Registration Fee, Operating Authority Fee (except private trucks), Highway Compensation (per vehicle) Fee, Optional (in lieu of Highway Compensation Fee) Mileage Tax.

TENNESSEE—Personal Property Tax, Sales Tax, Gasoline Tax, Special Fuel Tax, Fuel Use Tax, Registration Fee, Operating Authority Fee and Inspection Fee (except private trucks), Pro-Rata Registration (buses only), Trip Permit Fee (trucks only).

TEXAS—Personal Property Tax, Sales Tax, Certificate of Title Fee, Gasoline Tax, Special Fuels Use Tax, Registration Fee, Operating Authority Fee and Vehicle Identification

Plate Fees (except private trucks), Motor Carrier Act Administrative Fee (except private trucks), Intangible Assets Tax (except private trucks), Occupation (gross receipts) Tax (except private trucks) (Note: Occupation Tax is in lieu of Intangible Assets Tax, applies only to first year or less of operation.)

UTAH—Personal Property Tax, Sales and Use Tax, Certificate of Title Fee, Gasoline Tax, Special Fuel Tax, Registration Fee, Operating Authority Fee and Special Identification Plate Fees (except private trucks), Sales (gross receipts) Tax (common carrier buses only), Trip Permit Fee, Alternative (in lieu of Trip Permit Fee) Mileage Tax.

VERMONT—Gasoline Tax, Registration Fee, Retaliatory Tax (except buses).

VIRGINIA—Certificate of Title Fee, Gasoline Tax, Special Fuels Tax, Fuel Use Tax, Registration Fee, Non-Resident Corporation Commission Registration Fee (private trucks only), City Street (per mile) Tax (except private trucks), Operating Authority Fee and Vehicle Registration Card Fee (except private trucks), Appraisal and Valuation (gross receipts) Tax (except private carriers), Road (gross receipts) Tax (buses only).

WASHINGTON—Excise (personal property) Tax, Sales Tax, Certificate of Title Fee, Gasoline Tax, Special Fuels Tax, Registration Fee, Additional Temporary (1958-1959) Registration Fees (except buses), Operating Authority Fee (common carrier buses only), Operating Authority Fee and Vehicle Identification Plate Fee (for-hire trucks and charter buses only), Regulatory (gross receipts) Fee (buses only), Public Utility (gross receipts) Tax (buses only), Mileage Tax (buses only), Regulatory Fees (for-hire trucks only), Pro-Rata Division of Regulatory Fees (for-hire trucks only), Pro-Rata Registration, Trip Permit Fee.

WEST VIRGINIA—Personal Property Tax, Sales Tax, Certificate of Title Fee, Fuel Tax, Fuel Use Tax, Registration Fee, PSC Vehicle License Fee (except private trucks), Privilege (gross receipts) Tax (except private trucks).

WISCONSIN—Gasoline Tax, Special Fuels Tax, Registration Fee, Operating Authority Fee and Vehicle Permit Fees (except private trucks).

WYOMING—Sales and Use Tax, Gasoline Tax, Registration Fee, Operating Authority Fee and Vehicle Identification Plates, Compensatory (vehicle-mile) Fees (buses only), Compensatory (ton-mile) Fees (trucks only), Trip Permit Fee.

SECTION

4

SELECTION

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PROFITS GO UP WHEN TEMPERATURE GOES DOWN!

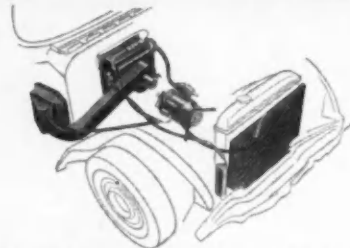


HARRISON Car and Truck Air Conditioning Boosts Driver Morale...Lifts Company Prestige!

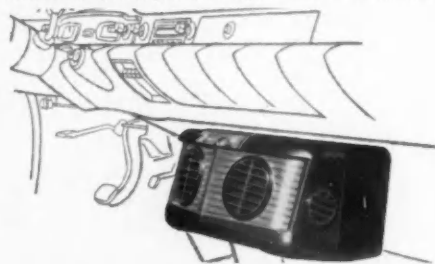
Keep your fleet on its feet all summer long with Harrison Air Conditioning. Your drivers will look their best and work their best in the comfortable, invigorating atmosphere of a Harrison-cooled car or truck. And they'll make a powerful selling impression for your company. Now there are two great Harrison Air Conditioning systems—Custom "under the hood" and the thrifty new *Cool-Pack* that fits snugly under the dash. So whether you've already purchased your new cars and trucks—or plan to buy—ask your General Motors dealer about Harrison Air Conditioning. It's the cool cargo that will pay its own way every trip.

cool air by the carload
HARRISON
AUTOMOTIVE AIR CONDITIONING

A GM PRODUCT—AVAILABLE AT
YOUR GENERAL MOTORS DEALER



CUSTOM—UNDER THE HOOD—is available on the new Cadillac, Buick, Oldsmobile, Pontiac and Chevrolet.



COOL-PACK—UNDER THE DASH—is designed for the new Chevrolet, Pontiac and Buick and most 1958 Chevrolet trucks.

HARRISON RADIATOR DIVISION, GENERAL MOTORS CORPORATION, LOCKPORT, N.Y.

1958 TRUCK SPECIFICATIONS

KEY TO DEFINITIONS

MAKE AND MODEL
Only Domestic Truck Models are listed.

OPTIONAL UNITS
For the express purpose of best fitting the truck to the individual job most of the models listed can be provided with optional engines, transmissions, axles, etc., and these models when so equipped are considered standard stock models.

CHASSIS LIST PRICE
The chassis list price applies to the minimum standard wheelbase with standard tires and standard equipment. All prices are F.O.B. factory. Chassis list price does not include the price of the Cab unless otherwise noted.

RECOMMENDED GROSS VEHICLE WEIGHT FOR NORMAL SERVICE
The Gross Weights published here-with are those supplied by manufac-

turers as their Recommended Gross Vehicle Weights for Normal Operating Conditions, and are based upon the Maximum Authorized Tire Size listed. In actual practice the manufacturer may either increase or decrease the gross vehicle weight rating when either favorable or unfavorable operating conditions are involved. Since the proper performance of a motor truck depends upon many factors, including grades, road conditions, etc., the gross weights that a manufacturer is prepared to recommend will vary with particular conditions, and the manufacturer's own standard of safety factors. Specific recommendations, therefore, should be obtained from the manufacturer's representative.

CHASSIS WEIGHT
The chassis weight listed includes the weight of the minimum standard wheelbase chassis, with cowl, with standard tires, with standard equipment, with crankcase and cooling system full, and 5 gallons of fuel in

the tank. It does not include the weight of the Cab. This applies to C.O.E. as well as conventional chassis types. Exceptions are noted.

STANDARD TIRE SIZE
The standard tire size listed is that which is included in the Chassis List Price.

MAXIMUM AUTHORIZED TIRE SIZE
The tire size listed in this column is the maximum size recommended by the manufacturer of the chassis for the Gross Vehicle Weight for Normal Operating Conditions. It is furnished at extra cost, if it differs from the standard size. Dual rears are understood; exceptions noted.

MINIMUM STANDARD WHEELBASE
The minimum standard wheelbase on which the Chassis List Price is based.

MAXIMUM STANDARD WHEELBASE
The maximum standard wheelbase is the extreme end of the standard range of wheelbases offered by the chassis maker.

MAXIMUM BRAKE HP.
Maximum Brake Horsepower at Given R.P.M. is actual dynamometer reading without accessories.

GEAR RATIO RANGE
Gear Ratio Range in High—Ratio within the range given are available at no extra cost. Exceptions are noted.

TRACTORS
Unless given the designation (N)—meaning not available as a tractor—all standard models may be assumed to be available as tractors. Exclusively Tractor models are designated (T).

KEY TO ABBREVIATIONS

MAKES—ALL

B—Bendix.
BL—Brown-Lipe.
Bu or Bud—Buda.
BW—Bendix-Westinghouse.
C—Chevrolet.
Cl or Cla—Clark.
Con—Continental.
Cu or Cum—Cummins-Diesel.
Deu—Deutz Air Cooled Diesel engine.
Eat—Eaton.
F—Ford.
Fu—Fuller.
G-H—Goodyear-Hawley type.

GMC—General Motors Corp.

H—Hotchkiss.
Her—Hercules.
HS—Hall-Scott.
Int.—International Harvester.
L—Lockheed.
LeR—LeRoi.
LH—Lockheed front, Wagner "hi-Tork" rear.
LT—Lockheed type front, Timken rear.
LW—Lockheed front, Wisconsin rear.
M—Midland.
N.P.—New Process.

O or Ow—Own.

Op or Opt.—Optional.
Shu—Shuler.
Spl—Spicer.
T or Tim—Timken-Detroit Axle Co.
Tw—Timken-Detroit-Westinghouse.
TW—Timken-Detroit-Wisconsin.
Var—Variable.
WG—Wagner Gear.
Wau—Waukesha.
W or Wis—Wisconsin.
WE—Wagner or Bendix.
WE—Wagner Electric.
Wg—Wagner "hi-Tork."

W—Westinghouse. WW—Westinghouse or Wagner.

T—Torque Tube. FT—Full-floating, tandem drive.

REAR AXLE

Final Drive and Type
B—Bevel.
CD—Chain Drive.
F—Full-floating.
H or Hy—Hypoid.
d—Dual range axle.
2—Double Reduction.
S—Spiral bevel.
W—Worm.
¾—Three Quarters Floating.
½—Semi-Floating.

GEAR RATIOS

(**)—Only one ratio.
Drive and Torque
H—Hotchkiss (springs)
R—Radius Rods.
L—Parallel Torque Rods.
T—Torque Arm.

GOVERNOR STANDARD

Y—Yes.
N—No.

KEY TO REFERENCES

c.f.—Cab Forward design.
c.o.e.—Cab-Over-Engine design.
l.c.f.—Low cab forward design.
(D)—Diesel-engine equipped.
(T)—Designed for tractor use only.
(C)—Ford or Chevrolet Models.
(R)—Remanufactured Fords.
A—Denotes "Includes Cab" when used with weights or prices.

CHEVROLET

†—283 V-8 Trademaster engine available.
††—283 V-8 Taskmaster engine available.
A—283 V-8 Super Taskmaster 4 barrel carburetor engine available.
†—Overdrive optional.
††—Powerglide available.
†††—Heavy duty 3 speed transmission available.
††††—4 speed transmission available.
†††††—Hydramatic available.
††††††—5 speed New Process transmission available.

AA—Powermatic available.
•—4.11 with overdrive; 3.36 with automatic transmissions.
†—3.70 available.
††—Two speed rear axle available.
†††—7.17 available.

COLEMAN

•—11.00/22 also available.
•†—Fu5A65 or Spicer 6352 also available.
†—Cum HRB600 also available with horsepower of 165-1800.

DIVCO

•—Front only; rear, 7.50/168.
†—Front only; rear, 7.50/208.
A—Front only; rear, 8.25/168.
††—Front only; rear, 7.50/20D.

DUPLEX

†—Torque Divider, Timken T70-2 speed.

FARCO

•—With 2-speed transfer case.
••—With 3-speed auxiliary and 2-speed transfer case.
RC—Chevrolet axle remanufactured.
RF—Ford axle remanufactured.

FEDERAL

•—Also available with tandem rear axle.

FORD

•—Other options available.

FWD

•—23 PT rear axle is a driving axle plus a trailing axle.
•—Models available with tilt cabs.

KENWORTH

††—Timken TK-500 PA Trailing Axle.
†—14.00/24, front; 16.00/24, rear.
††—Optional transmission.
•—C.O.E. optional.
•—One man cab.

•—Torque converter plus Torquematic transmission optional.
††—Both C.O.E. and cab beside engine optional.
†††—14.00/24 front; 18.00/25 rear.
••—Cummins NHRBSID 600.
†††—Allison TCL 654 plus TG 607.
•—1148.
•—1108.

MARMON-HERRINGTON

•—Three-speed trans. opt.
†—Five-speed trans. opt.

OSHKOSH

•—Includes cab.
•—1091 cu. in.
••—Hydraulic coupling optional.
•—Dependent upon engine.

REO

•—Model 331-OA and 331-OA LPG engines can be furnished.
†—Two speed axle available.
††—Model 255-OA-LPG or 292-OA engine can be furnished.

†—OH-170 or OH-160 LPG engine can be furnished.
•—OH-160 LPG engine can be furnished.
•—Model OV-235 or OV-220 LPG engine can be furnished.

STUDEBAKER

•—Two speed 5.93-8.10 or 6.48-8.86 optional.
•—Two speed 6.16-8.48 or 6.61-9.09 optional.

TRUCKSTELL

††—With 3 speed power divider.
•—Weight with cab and maximum tires.

WARD LA FRANCE

†—Available with optional rear axles.
••—Available with 11.00/22 or 12.00/20 tires for G.V.W. of 60,000 lbs and optional front and rear axles.
†††—Auxiliary transmission, Fulmer 3A65, 3B65, 3A92 and 3B92.

WILLEYS

•—Overdrive optional.

SPECIFICATIONS BEGIN ON PAGE 214

Again in '57...

**ECONOMY *and*
DEPENDABILITY**

make **MACK**

first by far in

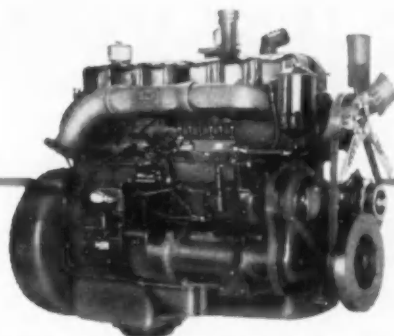
**DIESEL TRUCK
SALES...**



The figures are in for 1957 and they prove it! More than ever, America's truckers are demanding quality, economy and highest earning power . . . and more than ever, they're finding it in Mack Diesel-powered trucks. For Mack in '57 not only sold the most Diesel trucks for the fifth straight year, but Mack captured a record 45.1% of sales*... *almost half this hotly contested market... and more than double the nearest make.*

This overwhelming preference, year after year . . . this swelling swing to a single make of truck . . . shows beyond doubt that there's no matching Mack for money-making performance . . . for long life . . . and for utmost dependability. See your Mack branch or distributor soon. Mack Trucks, Inc., Plainfield, New Jersey. In Canada: Mack Trucks of Canada, Ltd.

*based on official industry figures



ECONOMY CHAMP AMONG HEAVY-DUTY TRUCK DIESEL ENGINES

Here's a major factor in Mack's amazing sales sweep in Diesel-powered trucks—the Mack Thermodyne® Diesel engine. At 170 h.p. (naturally aspirated) and at 205 h.p. (turbocharged), Mack Thermodyne Diesel engines maintain their reputation as the most dependable, longest lived and most economical of all Diesel truck engines. And Mack engines are obtainable only in Mack trucks and tractors.

THERE'S A MACK DIESEL TRUCK FOR EVERY IMPORTANT HAULING JOB. For highway hauling . . . for terminal or freight depot work . . . for construction, road-building or concrete mixer hauling—there are Mack Diesel trucks and tractors: four and six-wheel; C.O.E. and conventional. Whatever you haul . . . wherever you haul it . . . you'll find higher profits and more efficient operations awaiting you at your Mack branch or distributor.

MACK

first name in Diesel truck sales



1958 TRUCK SPECIFICATIONS

Continued from Page 211

MAKE AND MODEL	WHEEL-BASE	Gross Vehicle Weight for Normal Service	Chassis Weight (See definition)	TIRE SIZES		ENGINE DETAILS					TRANSMISSION		REAR AXLE				
				Standard Front and Rear	D-dual rear S-single rear	Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Make and Model	Forward Speeds	Make and Model	Gear and Type	Drive and Torque	Gear Ratio Range in High
Chevrolet	H58 117 1/4	4100	3667	7.50/14S	8.00/14S	O-Blue Flame	6-3 1/2 x 3 1/2	236	8.3	215	145-4200	Ownt	3	Ownt	H 1 1/2	H	5.7-6.16
	G58 117 1/4	4100	3669	7.50/14S	8.00/14S	O-Turbo Fire	6-3 1/2 x 3 1/2	236	8.3	215	145-4200	Ownt	3	Ownt	H 1 1/2	H	5.7-6.16
	3A58 114	5000	3055	6.70/15S	7/17.5S	O-Th. Mas.†	6-3 1/2 x 3 1/2	236	8.3	215	145-4200	Ownt	3	Ownt	H 1 1/2	H	5.7-6.16
	3B58 123 1/2	5000	3245	6.70/15S	7/17.5S	O-Th. Mas.†	6-3 1/2 x 3 1/2	236	8.3	215	145-4200	Ownt	3	Ownt	H 1 1/2	H	5.7-6.16
	(c.f.) 3C58 104	10000	2795	7/17.5S	8/19.5D	O-Th. Mas. Sp.	6-3 1/2 x 3 1/2	236	8.3	215	145-4200	Ownt	3	Ownt	H 1 1/2	H	5.7-6.16
	(c.f.) 3D58 125	10000	2880	7/17.5S	8/19.5D	O-Th. Mas. Sp.	6-3 1/2 x 3 1/2	236	8.3	215	145-4200	Ownt	3	Ownt	H 1 1/2	H	5.7-6.16
	3F58 137	10000	2885	7/17.5S	8/19.5D	O-Th. Mas. Sp.	6-3 1/2 x 3 1/2	236	8.3	215	145-4200	Ownt	3	Ownt	H 1 1/2	H	5.7-6.16
	3E58 123 1/2	9600	3450	7/17.5S	7/17.5D	O-Th. Mas.†	6-3 1/2 x 3 1/2	236	8.3	215	145-4200	Ownt	3	Ownt	H 1 1/2	H	5.7-6.16
	3G58 135	9600	3665	8/17.5S	8/19.5D	O-Th. Mas.†	6-3 1/2 x 3 1/2	236	8.3	215	145-4200	Ownt	3	Ownt	H 1 1/2	H	5.7-6.16
	4A58 132 1/2	14000	4475	7/22.5D	8/22.5	O-Th. Mas.†	6-3 1/2 x 3 1/2	236	8.3	215	145-4200	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	4B58 156 1/2	14000	4825	7/22.5D	8/22.5	O-Th. Mas.†	6-3 1/2 x 3 1/2	236	8.3	215	145-4200	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	(L.c.f.) 5D58 112 1/2	15000	5155	8/22.5D	9/22.5	O-Task. Mas.†	6-3 1/2 x 3 1/2	283	8.0	270	175-4400	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	(L.c.f.) 5L58 124 1/2	15000	5200	8/22.5D	9/22.5	O-Task. Mas.†	6-3 1/2 x 3 1/2	283	8.0	270	175-4400	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	(L.c.f.) 5E58 136 1/2	15000	5245	8/22.5D	9/22.5	O-Task. Mas.†	6-3 1/2 x 3 1/2	283	8.0	270	175-4400	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	(L.c.f.) 5F58 160 1/2	15000	5370	8/22.5D	9/22.5	O-Task. Mas.†	6-3 1/2 x 3 1/2	283	8.0	270	175-4400	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	5H58 132 1/2	15000	5070	8/22.5D	9/22.5	O-Job Mas.††	6-3 1/2 x 3 1/2	261	8.0	235	150-4000	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	6R58 144 1/2	15000	5115	8/22.5D	9/22.5	O-Job Mas.††	6-3 1/2 x 3 1/2	261	8.0	235	150-4000	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	6G58 156 1/2	15000	5145	8/22.5D	9/22.5	O-Job Mas.††	6-3 1/2 x 3 1/2	261	8.0	235	150-4000	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	6H58 174 1/2	15000	5245	8/22.5D	9/22.5	O-Job Mas.††	6-3 1/2 x 3 1/2	261	8.0	235	150-4000	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	6T58 196 1/2	15000	5520	8/22.5D	9/22.5	O-Job Mas.††	6-3 1/2 x 3 1/2	261	8.0	235	150-4000	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	(L.c.f.) 8A58 112 1/2	19000	5155	8/22.5D	9/22.5	O-Task. Mas.†	6-3 1/2 x 3 1/2	283	8.0	270	175-4400	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	(L.c.f.) 8K58 124 1/2	19000	5200	8/22.5D	9/22.5	O-Task. Mas.†	6-3 1/2 x 3 1/2	283	8.0	270	175-4400	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	(L.c.f.) 8L58 136 1/2	19000	5245	8/22.5D	9/22.5	O-Task. Mas.†	6-3 1/2 x 3 1/2	283	8.0	270	175-4400	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	(L.c.f.) 8M58 160 1/2	19000	5370	8/22.5D	9/22.5	O-Task. Mas.†	6-3 1/2 x 3 1/2	283	8.0	270	175-4400	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	8N58 132 1/2	19000	5070	8/22.5D	9/22.5	O-Job Mas.††	6-3 1/2 x 3 1/2	261	8.0	235	150-4000	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	8P58 144 1/2	19000	5115	8/22.5D	9/22.5	O-Job Mas.††	6-3 1/2 x 3 1/2	261	8.0	235	150-4000	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	8Q58 156 1/2	19000	5145	8/22.5D	9/22.5	O-Job Mas.††	6-3 1/2 x 3 1/2	261	8.0	235	150-4000	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	8R58 174 1/2	19000	5245	8/22.5D	9/22.5	O-Job Mas.††	6-3 1/2 x 3 1/2	261	8.0	235	150-4000	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	8S58 196 1/2	19000	5520	8/22.5D	9/22.5	O-Job Mas.††	6-3 1/2 x 3 1/2	261	8.0	235	150-4000	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	(L.c.f.) 9K58 124 1/2	21000	5245	10/22.5D	10/22.5	O-Job Mas.††	6-3 1/2 x 3 1/2	261	8.0	235	150-4000	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	(L.c.f.) 9L58 136 1/2	21000	5290	10/22.5D	10/22.5	O-Job Mas.††	6-3 1/2 x 3 1/2	261	8.0	235	150-4000	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	(L.c.f.) 9M58 144 1/2	21000	5370	10/22.5D	10/22.5	O-Job Mas.††	6-3 1/2 x 3 1/2	261	8.0	235	150-4000	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	9N58 156 1/2	21000	5415	10/22.5D	10/22.5	O-Job Mas.††	6-3 1/2 x 3 1/2	261	8.0	235	150-4000	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	9P58 174 1/2	21000	5520	10/22.5D	10/22.5	O-Job Mas.††	6-3 1/2 x 3 1/2	261	8.0	235	150-4000	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	(c.f.) 9J58 123 1/2	18000	4085	8/22.5D	9/22.5	O-Job Mas.††	6-3 1/2 x 3 1/2	261	8.0	235	150-4000	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	(c.f.) 9K58 159 1/2	18000	4160	8/22.5D	9/22.5	O-Job Mas.††	6-3 1/2 x 3 1/2	261	8.0	235	150-4000	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	(Sc. Bus. Ch.) 9L58 160 1/2	18000	4305	8/22.5D	9/22.5	O-Th. Mas.†	6-3 1/2 x 3 1/2	261	8.0	235	150-4000	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	(Sc. Bus. Ch.) 9M58 166 1/2	18000	5065	8/22.5D	9/22.5	O-Job Mas.††	6-3 1/2 x 3 1/2	261	8.0	235	150-4000	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	(Sc. Bus. Ch.) 9E58 222 1/2	18000	5110	8/22.5D	9/22.5	O-Job Mas.††	6-3 1/2 x 3 1/2	261	8.0	235	150-4000	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	(Sc. Bus. Ch.) 9F58 240	20000	5390	8/22.5D	10/22.5	O-Sup. Takmas.	6-3 1/2 x 3 1/2	283	8.0	275	175-4400	NP	4	Ownt	H 1 1/2	H	5.7-6.16
	(Sc. Bus. Ch.) 10F58 240	22000	6240	9/22.5D	10/22.5	O-Ld. Mas.	6-4x3 1/2	322	7.7	310	195-4000	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	(L.c.f.) 7A58 112 1/2	22000	5520	8/22.5D	10/22.5	O-Sup. Takmas.	6-3 1/2 x 3 1/2	283	8.0	275	175-4400	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	(L.c.f.) 7B58 124 1/2	22000	5555	8/22.5D	10/22.5	O-Sup. Takmas.	6-3 1/2 x 3 1/2	283	8.0	275	175-4400	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	(L.c.f.) 7C58 132 1/2	22000	5605	8/22.5D	10/22.5	O-Sup. Takmas.	6-3 1/2 x 3 1/2	283	8.0	275	175-4400	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	8A58 132 1/2	22000	5450	8/22.5D	10/22.5	O-Sup. Takmas.	6-3 1/2 x 3 1/2	283	8.0	275	175-4400	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	8B58 144 1/2	22000	5515	8/22.5D	10/22.5	O-Sup. Takmas.	6-3 1/2 x 3 1/2	283	8.0	275	175-4400	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	8C58 156 1/2	22000	5580	8/22.5D	10/22.5	O-Sup. Takmas.	6-3 1/2 x 3 1/2	283	8.0	275	175-4400	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	8D58 174 1/2	22000	5635	8/22.5D	10/22.5	O-Sup. Takmas.	6-3 1/2 x 3 1/2	283	8.0	275	175-4400	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	8E58 192 1/2	22000	5795	8/22.5D	10/22.5	O-Sup. Takmas.	6-3 1/2 x 3 1/2	283	8.0	275	175-4400	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16
	(L.c.f.) 9A58 112 1/2	25000	6140	9/22.5D	11/22.5	O-Work Mas.	6-4x3 1/2	348	8.0	310	195-4000	Spid	5	Eaton	H 1 1/2	H	5.7-6.16
(L.c.f.) 9B58 124 1/2	25000	6390	9/22.5D	11/22.5	O-Work Mas.	6-4x3 1/2	348	8.0	310	195-4000	Spid	5	Eaton	H 1 1/2	H	5.7-6.16	
(L.c.f.) 9C58 136 1/2	25000	6580	9/22.5D	11/22.5	O-Work Mas.	6-4x3 1/2	348	8.0	310	195-4000	Spid	5	Eaton	H 1 1/2	H	5.7-6.16	
(L.c.f.) 9D58 144 1/2	25000	6720	9/22.5D	11/22.5	O-Work Mas.	6-4x3 1/2	348	8.0	310	195-4000	Spid	5	Eaton	H 1 1/2	H	5.7-6.16	
10A58 132 1/2	25000	6250	9/22.5D	11/22.5	O-Work Mas.	6-4x3 1/2	348	8.0	310	195-4000	Spid	5	Eaton	H 1 1/2	H	5.7-6.16	
10B58 144 1/2	25000	6360	9/22.5D	11/22.5	O-Work Mas.	6-4x3 1/2	348	8.0	310	195-4000	Spid	5	Eaton	H 1 1/2	H	5.7-6.16	
10C58 156 1/2	25000	6425	9/22.5D	11/22.5	O-Work Mas.	6-4x3 1/2	348	8.0	310	195-4000	Spid	5	Eaton	H 1 1/2	H	5.7-6.16	
10D58 174 1/2	25000	6515	9/22.5D	11/22.5	O-Work Mas.	6-4x3 1/2	348	8.0	310	195-4000	Spid	5	Eaton	H 1 1/2	H	5.7-6.16	
10E58 192 1/2	25000	6580	9/22.5D	11/22.5	O-Work Mas.	6-4x3 1/2	348	8.0	310	195-4000	Spid	5	Eaton	H 1 1/2	H	5.7-6.16	
9C58 156 1/2	26000	6310	8/22.5D	9/22.5	O-Sup. Takmas.	6-3 1/2 x 3 1/2	283	8.0	275	175-4400	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16	
9D58 174 1/2	26000	6380	8/22.5D	9/22.5	O-Sup. Takmas.	6-3 1/2 x 3 1/2	283	8.0	275	175-4400	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16	
9E58 182 1/2	26000	6525	8/22.5D	9/22.5	O-Sup. Takmas.	6-3 1/2 x 3 1/2	283	8.0	275	175-4400	Ownt	4	Ownt	H 1 1/2	H	5.7-6.16	
(Tan.) 10C5																	

Brute Strength • Endurance • Long Life ... **DIVCO!**

- Rugged Trouble-Free Performance ● Minimum Maintenance and Upkeep ● Many Extra Years of Service ● Long, Hard Use on Any Type Road ● Unequalled Operating Economy
- Greatest Value — Feature for Feature ●

The Only Multi-Stop Delivery Trucks Specifically Engineered for BAKERIES, DAIRIES, DRY CLEANERS, FLORISTS, LAUNDRIES, PARCEL DELIVERIES, Etc.



HIGH TENSILE STEEL STRUCTURE



80% of All DIVCOS Built Are Still In Use!

DIVCO TRUCK DIVISION — Divco-Wayne Corp., Detroit 5, Michigan

1958 TRUCK SPECIFICATIONS

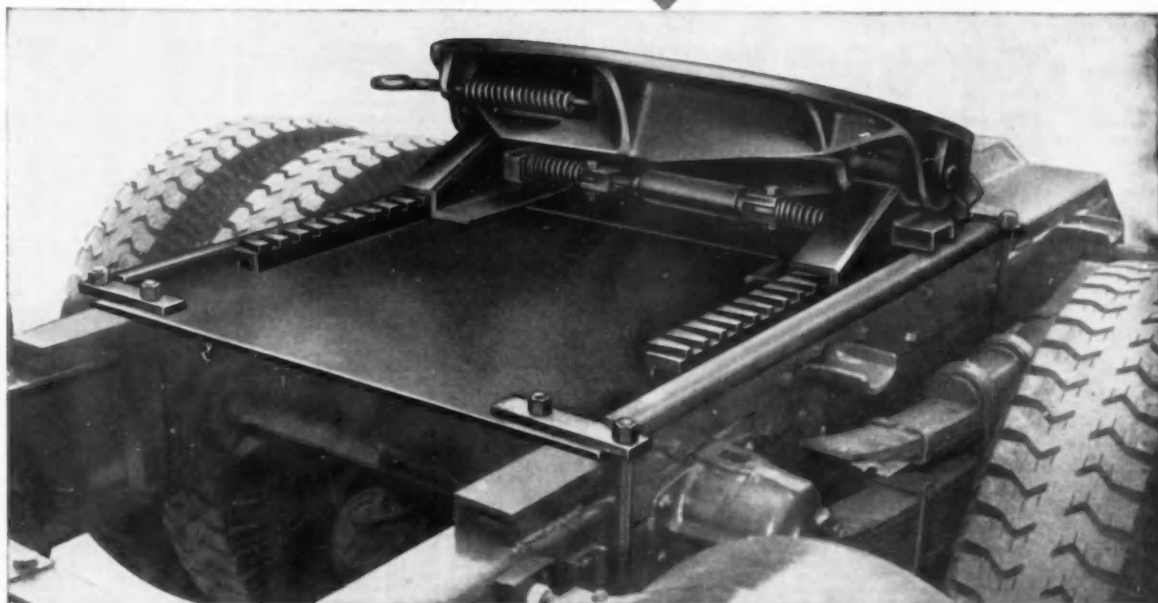
Continued from Page 214

MAKE AND MODEL	WHEEL-BASE		Gross Vehicle Weight for Normal Service	Chassis Weight (See definition)	TIRE SIZES		ENGINE DETAILS					TRANSMISSION		REAR AXLE				
	Minimum Standard	Maximum Standard			D-dual rear S-single rear		Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Make and Model	Forward Speeds	Make and Model	Gear and Type	Drive and Torque	
					Standard Front and Rear	Maximum Authorized Tire Size (Duals unless noted)												
Dodge—Cont'd																		
364HD	115	115	9500	3143	7.50/16S	8.50/16S	Con F4162S	4-3-1/4x4-1/2	162	6.2	123	55-2800	WG T87	Int L150	3	H	H	5.57-6.16
374	125	125	9500	3232	7.50/16S	8.50/16S	Her QXD3	6-3-1/4x4-1/2	230	6.0	173	75-2800	WG T9	Int L150	3	S	H	5.14-6.00
42	130	130	7000	3370	7.50/16S	8.50/16S	Own Super 6	6-3-1/4x4-1/2	253	7.5	220	102-3400	WG T98	Int L150	3	H	H	5.57-6.16
82	117 1/2	117 1/2	7000	3281	7.50/16S	8.50/16S	Own Super 6	6-3-1/4x4-1/2	253	7.5	220	102-3400	WG T98	Int L150	3	H	H	5.57-6.16
41	130	130	16500	4307	7.00/20	8.50/20	Own Super 6	6-3-1/4x4-1/2	253	7.5	220	102-3400	WG T98	Int L160	3	H	H	6.00-7.17
51	117 1/2	117 1/2	16500	4277	7.00/20	8.50/20	Own Super 6	6-3-1/4x4-1/2	253	7.5	220	102-3400	WG T98	Int L160	3	H	H	6.00-7.17
Dodge																		
L6-D100	108	116	5100	2350	6.70/15S	8.50/16S	Own	6-3-1/4x4-1/2	230	7.9	202	120-3600	Own PC	3	Own	H 1 1/2	H	3.73-4.89
L6-D100	108	116	5100	2450	6.70/15S	8.50/16S	Own	6-3-1/4x4-1/2	315	8.1	290	204-4400	Own PC	3	Own	H 1 1/2	H	3.73-4.89
L6-D200	110	116	7500	2825	7.17/5S	7.17/5S	Own	6-3-1/4x4-1/2	230	7.9	202	120-3600	NP 8990S	3	Own	HF	H	4.1-4.89
L6-D200	110	116	7500	2925	7.17/5S	7.17/5S	Own	6-3-1/4x4-1/2	315	8.1	290	204-4400	NP 8990S	3	Own	HF	H	4.1-4.89
L6-D300	126	126	9000	2850	7.17/5S	7.17/5S	Own	6-3-1/4x4-1/2	230	7.9	202	120-3600	NP 8990S	3	Own	HF	H	4.1-4.89
L6-D300	126	126	9000	2950	7.17/5S	7.17/5S	Own	6-3-1/4x4-1/2	315	8.1	290	204-4400	NP 8990S	3	Own	HF	H	4.1-4.89
L6-D400	129	171	15000	3975	7.22/5D	9.22/5S	Own	6-3-1/4x4-1/2	251	7.1	218	125-3600	NP 420	4	Own	HF	H	5.63-6.83
L6-D400	129	171	15000	4050	7.22/5D	9.22/5S	Own	6-3-1/4x4-1/2	315	8.1	290	204-4400	NP 420	4	Own	HF	H	5.63-6.83
L6-D500	129	193	19500	4300	8.22/5D	10.22/5S	Own	6-3-1/4x4-1/2	251	7.1	218	125-3600	NP 420	4	Tim F147	HF	H	6.2-6.8
L6-D500	129	193	19500	4375	8.22/5D	10.22/5S	Own	6-3-1/4x4-1/2	315	8.1	290	204-4400	NP 420	4	Tim F147	HF	H	6.2-6.8
L6-D600	129	193	22000	4900	8.22/5D	10.22/5S	Own	6-3-1/4x4-1/2	265	7.1	228	130-3600	NP 420	4	Eat 1614	HF	L	** -7.17
L6-D600	129	193	22000	4975	8.22/5D	10.22/5S	Own	6-3-1/4x4-1/2	315	8.0	295	207-4400	NP 540	5	Eat 1614	HF	L	** -7.17
L6-D700	129	193	25000	5200	9.22/5D	10.22/5S	Own	6-3-1/4x4-1/2	354	7.5	319	218-3900	NP 540	5	Tim H141	HF	H	6.8-7.2
L6-D800	132	192	29000	6100	10.22/5D	12.22/5S	Own	6-3-1/4x4-1/2	354	7.5	340	224-3900	Cla 265	5	Tim L140	HF	H	7.2-7.4
L6-D800	132	192	30000	6450	11.22/5D	12.22/5S	Own	6-3-1/4x4-1/2	354	7.5	360	234-3900	Cla 300V	5	Tim QT140	HF	H	** -7.4
(c.o.s.) L6-C500	108	126	19500	4625	6.70/15S	8.50/16S	Own	6-3-1/4x4-1/2	315	8.1	290	204-4400	NP 420	4	Tim F147	HF	H	6.2-6.8
(c.o.s.) L6-C600	108	126	22000	4550	8.22/5D	10.22/5S	Own	6-3-1/4x4-1/2	315	8.1	290	207-4400	NP 540	5	Eat 1614	HF	H	6.5-7.17
(c.o.s.) L6-C700	108	126	25000	5850	9.22/5D	10.22/5S	Own	6-3-1/4x4-1/2	354	7.5	319	218-3900	NP 540	5	Tim H141	HF	H	6.8-7.2
(c.f.) L6-P300	104	126	9000	2550	7.17/5S	7.17/5S	Own	6-3-1/4x4-1/2	230	7.9	202	120-3600	WG T87D	3	Own	HF	H	4.1-4.89
(c.f.) L6-P300	104	126	9000	2650	7.17/5S	7.17/5S	Own	6-3-1/4x4-1/2	315	8.1	290	204-4400	WG T87D	3	Own	HF	H	4.1-4.89
(c.f.) L6-P400	108	153	15000	3325	8.19/5S	8.22/5S	Own	6-3-1/4x4-1/2	230	7.9	202	120-3600	WG T87D	3	Own	HF	H	5.63-6.83
(c.f.) L6-P400	108	153	15000	3425	8.19/5S	8.22/5S	Own	6-3-1/4x4-1/2	315	8.1	290	204-4400	WG T87D	3	Own	HF	H	5.63-6.83
(Sc. Bus.) L6-S400	153	193	15000	4425	7.22/5D	9.22/5S	Own	6-3-1/4x4-1/2	251	7.1	218	125-3600	NP 420	4	Own	HF	H	6.29-6.83
(Sc. Bus.) L6-S400	153	193	15000	4500	7.22/5D	9.22/5S	Own	6-3-1/4x4-1/2	315	8.1	290	204-4400	NP 420	4	Own	HF	H	6.29-6.83
(Sc. Bus.) L6-S500	193	217	19500	4700	8.22/5D	10.22/5S	Own	6-3-1/4x4-1/2	251	7.1	218	125-3600	NP 420	4	Tim F147	HF	L	6.2-6.8
(Sc. Bus.) L6-S500	193	217	19500	4775	8.22/5D	10.22/5S	Own	6-3-1/4x4-1/2	315	8.1	290	204-4400	NP 420	4	Tim F147	HF	L	6.2-6.8
(Sc. Bus.) L6-S600	236	236	22000	5600	8.22/5D	10.22/5S	Own	6-3-1/4x4-1/2	265	7.1	228	130-3600	NP 420	4	Eat 1614	HF	L	** -7.17
(Sc. Bus.) L6-S600	236	236	22000	5675	8.22/5D	10.22/5S	Own	6-3-1/4x4-1/2	315	8.1	295	207-4400	NP 540	5	Eat 1614	HF	L	** -7.17
(Sc. Bus.) L6-S700	236	254	23000	5825	8.22/5D	10.22/5S	Own	6-3-1/4x4-1/2	354	7.5	319	218-3900	NP 540	5	Tim H141	HF	L	** -6.8
Duplex																		
T-308	136	220	23000	*6800	8.25/20	9.00/20	Int BD308	6-3-1/4x4-1/2	308	6.5	273	145-3600	Fu SB330	5	Tim H146	B	H	** -7.2
R-427	136	220	30000	*8200	9.00/20	11.00/20	Con B6427	6-4-1/4x4-1/2	427	6.6	325	141-2500	Fu SA43	5	Tim QT340	Fd	R	6.42-8.38
R-450	136	220	30000	*8500	9.00/20	11.00/20	Int RD450	6-4-1/4x4-1/2	450	6.5	388	182-3000	Fu SA43	5	Tim QT340	Fd	R	6.42-8.38
KH	148	220	34000	*10500	11.00/20	12.00/20	Her RXC	6-4-1/4x4-1/2	529	5.4	395	132-2300	Fu SA620	5	Tim U200	2F	R	** -9.76
K-501	148	220	34000	*10500	11.00/20	12.00/20	Int RD501	6-4-1/4x4-1/2	501	6.5	444	212-3000	Fu SA620	5	Tim U200	2F	R	** -9.76
L	148	220	37000	*11300	11.00/20	12.00/20	Her RXLD	6-4-1/4x4-1/2	558	5.4	430	154-2400	Fu SC650	5	Tim U200	2F	R	** -9.76
L-6602	148	220	37000	*11650	11.00/20	12.00/20	Con R6602	6-4-1/4x4-1/2	602	6.1	465	200-2600	Fu SC650	5	Tim U200	2F	R	** -9.76
LC-600	148	220	37000	*12900	11.00/20	12.00/20	Cum HRB600	6-5-1/4x4-1/2	743	16.0	540	165-1800	Fu SC650	5	Tim U200	2F	R	** -6.42
Federal																		
200R1	145	193	22000	*6570	8.25/20	11.00/20	Her JXD	6-4-1/4x4-1/2	320	254	125-3200	Cla 205V	5	Tim H146	H	H	** -7.20	
(D) 200R1	145	193	22000	*6990	8.25/20	11.00/20	Con TD6427	6-4-1/4x4-1/2	427	307	116-2400	Cla 290V	5	Tim H140	H	H	** -6.17	
200R2	145	193	22000	*6570	8.25/20	11.00/20	Her JXD	6-4-1/4x4-1/2	320	254	125-3200	Cla 205V	5	Tim H340	2H	H	6.16-8.48	
(D) 200R2	145	193	22000	*6990	8.25/20	11.00/20	Con TD6427	6-4-1/4x4-1/2	427	307	116-2400	Cla 290V	5	Tim H340	2H	H	6.16-8.48	
300R1	145	193	24000	*6875	9.00/20	11.00/20	Her JXLD	6-4-1/4x4-1/2	339	264	138-3200	Cla 205V	5	Tim L140	H	H	** -6.17	
(D) 300R1	145	193	24000	*7450	9.00/20	11.00/20	Cum JN6S	6-4-1/4x4-1/2	401	290	125-2500	Cla 290V	5	Tim L140	H	H	** -6.17	
400R1	145	193	29000	*7825	10.00/20	12.00/20	Her JXLD	6-4-1/4x4-1/2	339	264	138-3200	Cla 205V	5	Tim L340	2H	H	6.63-8.52	
(D) 400R1	145	193	29000	*8372	10.00/20	12.00/20	Cum JN6S	6-4-1/4x4-1/2	401	290	125-2500	Cla 290V	5	Tim L340	2H	H	6.63-8.52	
400R2	145	193	29000	*9672	10.00/20	12.00/20	Con T6427	6-4-1/4x4-1/2	427	356	179-3000	Cla 290V	5	Tim QT140	H	H	** -6.83	
(D) 400R2	145	193	29000	*9602	10.00/20	12.00/20	Cum JB5600	6-4-1/4x4-1/2	401	350	150-2500	Cla 290V	5	Tim QT140	H	H	** -6.83	
500R1	145	193	34000	*10600	11.00/22	12.00/22	Con T6427	6-4-1/4x4-1/2	427	356	179-3000	Cla 290V	5	Tim QT340	2H	H	6.65-9.17	
(D) 500R1	145	193	34000	*10900	11.00/22	12.00/22	Cum JB5600	6-4-1/4x4-1/2	401	350	150-2500	Cla 290V	5	Tim QT340	2H	H	6.65-9.17	
500R2	145	193	34000	*10300	11.00/22	12.00/22	Cum U6501	6-4-1/4x4-1/2	501	413	178-2600	Fu SA65	5	R140	H	H	** -6.83	
(D) 500R2	145	193	34000	*10300	11.00/22	12.00/22	Cum HRFB600	6-5-1/4x4-1/2	743	550	180-2000	Fu SA65	5	R140	H	H	** -6.83	
500R3	145	193	34000	*11395	11.00/22	12.00/22	Cum HRFB600	6-5-1/4x4-1/2	743	550	180-2000	Fu SA65	5	R340	2H	H	6.31-8.38	
(D) 500R3	145	193	34000	*11395	11.00/22	12.00/22	Cum HRFB600	6-5-1/4x4-1/2	743	550	180-2000	Fu SA65	5	R340	2H	H	6.31-8.38	
600R1	145	193	40000	*11132	11.00/22	12.00/22	Con R6602	6-4-1/4x4-1/2	602	484	232-2800	Fu SA65	5	Tim U200	2H	H	** -7.20	
(D) 600R1	145	193	40000	*11265	11.00/22													

NOW

HOLLAND'S "2500" SLIDING 5th WHEEL

FOR BIGGER PAYLOAD



AUTOMATIC CAB CONTROL — ONE-MAN OPERATION

Holland's new 2500-36 Sliding Fifth Wheel has met with tremendous enthusiasm on the part of users, all of whom say that it has materially boosted their trailer payloads. Having 15 positions in 1½-inch increments over a travel distance of 23-inches, the load weight can be distributed over the tractor axles, both front and rear, as occasion demands. Also, the gross combination length can be brought into line with any highway regulation without lessening the payload. Simple, easy installation, and it becomes a veritable Rock of Gibraltar. Takes no time at all to couple and lock, — one man does it, from the cab, automatically. Ask us about it; we'll give you all the facts and details.

EASIEST TO INSTALL
EASIEST TO OPERATE

LATERAL 2-WEDGE LOCKING
TAKES UP ALL THE PLAY

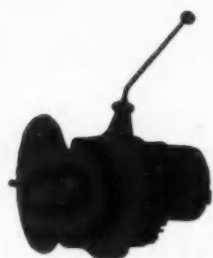


HOLLAND HITCH COMPANY
Holland, Michigan

1958 TRUCK SPECIFICATIONS

Continued from Page 216

MAKE AND MODEL	WHEEL- BASE		Gross Vehicle Weight for Normal Service	Chassis Weight (See definition)	TIRE SIZES		ENGINE DETAILS					TRANSMISSION		REAR AXLE				
	Minimum Standard	Maximum Standard			D-dual rear S-single rear		Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Make and Model	Forward Speeds	Make and Model	Gear and Type	Drive and Torque	Gear Ratio Range in High
					Standard Front and Rear	Maximum Axle Tire Size (Dual unless noted)												
Ford—Cont'd																		
Courier	116	116	4600	3478	7.50/14S	8.00/14S	Ford ERP	6-3½ x 3½	223	8.6	212	144-4200	Ford*	3	Ford 3000	H½	H	3.89*
	116	116	4600	3587	7.50/14S	8.00/14S	Ford EDB	6-3½ x 3½	292	9.1	295	205-4400	Ford*	3	Ford 3000	H½	H	3.89*
	116	116	4600	3645	7.50/14S	8.00/14S	Ford EDT	6-4½ x 3½	352	10.0	395	300-4600	Ford*	3	Ford 3000	H½	H	3.70*
F-100	110	118	5000	*3030	6.70/16S	6.50/16S	Ford EBR	6-3½ x 3½	223	8.3	207	138-4200	Ford*	3	Ford 3300	H½	H	3.70*
	110	118	5000	*3030	6.70/16S	6.50/16S	Ford ECW	6-3½ x 3½	272	7.3	260	171-4400	Ford*	3	Ford 3300	H½	H	3.70*
F-250	118	118	7400	*3370	6.50/16S	8/19.5S	Ford EBR	6-3½ x 3½	223	8.3	207	138-4200	Ford*	3	Spi 60	HF	H	** -4.88
	118	118	7400	*3370	6.50/16S	8/19.5S	Ford ECW	6-3½ x 3½	272	8.3	260	171-4400	Ford*	3	Spi 60	HF	H	** -4.56
F-350	130	130	8900	*3740	8/17.5S	8/17.5S	Ford EBR	6-3½ x 3½	223	8.3	207	139-4200	WG T98A*	4	Tim B100	HF	H	5.14*
	130	130	8900	*3740	8/17.5S	8/17.5S	Ford ECW	6-3½ x 3½	272	8.3	260	171-4400	WG T98A*	4	Tim B100	HF	H	4.86*
	130	130	8900	*3740	8/17.5D	8/17.5	Ford ECV	6-3½ x 3½	272	8.3	262	181-4400	WG T98A*	4	Tim B100	HF	H	5.14*
F-500	130	134	15000	*4515	7/22.5D	8/22.5	Ford EBR	6-3½ x 3½	223	8.3	207	139-4200	WG T98A*	4	Tim C100*	HF	H	6.2*
	130	134	15000	*4515	7/22.5D	8/22.5	Ford ECV	6-3½ x 3½	272	8.3	262	181-4400	WG T98A*	4	Tim D100*	HF	H	5.83*
	130	134	15000	*4515	7/22.5D	8/22.5	Ford ECR	6-3½ x 3½	272	7.6	260	178-3800	WG T98A*	4	Tim D100*	HF	H	5.83*
F-600	130	192	17000	*4860	8/22.5D	10/22.5	Ford EBR	6-3½ x 3½	223	8.3	207	139-4200	WG T98A*	4	Tim F106*	HF	H	6.8*
	130	192	*17000	*4860	8/22.5D	10/22.5	Ford ECV	6-3½ x 3½	272	8.3	262	181-4400	WG T98A*	4	Tim F106*	HF	H	6.2*
	130	192	*17000	*4860	8/22.5D	10/22.5	Ford ECR	6-3½ x 3½	272	7.6	260	178-3800	WG T98A*	4	Tim F106*	HF	H	6.2*
F-700	132	192	*21000	*5420	8/22.5D	10/22.5	Ford ECV	6-3½ x 3½	272	8.3	262	181-4400	WG T98A*	4	Tim F106*	HF	H	7.2*
	132	192	*21000	*5420	8/22.5D	10/22.5	Ford ECR	6-3½ x 3½	272	7.6	260	178-3800	WG T98A*	4	Tim F106*	HF	H	7.2*
F-750	132	192	22000	*5965	9/22.5D	10/22.5	Ford ECS	6-3½ x 3½	302	7.6	299	196-3800	NP 540*	5	Eat 1614	HF	H	7.17*
F-800	132	192	23000	*6520	10/22.5D	11/22.5	Ford ECT	6-3½ x 3½	332	7.6	328	212-3800	Cla 265*	5	Eat 1790A*	SF	H	7.17*
F-850	132	192	25000	*6925	10/22.5	11/22.5	Ford EDL	6-4½ x 3½	401	7.5	350	226-3800	Spi 4652	5	Eat 1790A*	SF	H	6.50-7.17
F-950	132	192	29000	*7540	11/22.5	12/24.5	Ford EDL	6-4½ x 3½	401	7.5	350	226-3800	Spi 4652	5	Eat 1892*	SF	H	6.50-7.17
F-1000	132	192	30000	*7810	11/22.5	12/24.5	Ford EDM	6-4½ x 3½	477	7.5	430	260-3600	Spi 6352	5	Eat 1893*	SF	H	6.50-7.17
F-1100	132	192	30000	*8045	11/22.5	12/24.5	Ford EDL	6-4½ x 3½	401	7.5	350	227-3400	Spi 6352	5	Eat 1911*	SF	H	6.17-6.67
C-850	99	153	26000	*7345	10/22.5	11/22.5	Ford EDL	6-4½ x 3½	401	7.5	350	226-3800	Spi 4652	5	Eat 1790A*	SF	H	6.50-7.17
C-950	99	153	30000	*7980	11/22.5	12/24.5	Ford EDL	6-4½ x 3½	401	7.5	350	226-3800	Spi 4652	5	Eat 1892*	SF	H	6.50-7.17
C-1000	99	153	31000	*6490	11/22.5	12/24.5	Ford EDM	6-4½ x 3½	477	7.5	430	260-3600	Spi 6352	5	Eat 1893*	SF	H	6.50-7.17
C-1100	99	153	31000	*6660	11/22.5	12/24.5	Ford EDM	6-4½ x 3½	477	7.5	490	277-3400	Spi 6352	5	Eat 1911*	SF	H	6.17-6.67*
C-550	99	153	18000	*5330	7/22.5D	9/22.5	Ford ECV	6-3½ x 3½	272	8.3	262	181-4400	WG T98A*	4	Tim D100	HF	H	5.83*
	99	153	18000	*5330	7/22.5D	9/22.5	Ford ECR	6-3½ x 3½	272	7.6	260	178-3800	WG T98A*	4	Tim D100	HF	H	5.83*
C-600	99	153	18500	*5520	8/22.5D	10/22.5	Ford ECV	6-3½ x 3½	272	8.3	262	181-4400	WG T98A*	4	Tim F104	HF	H	6.2*
	99	153	18500	*5520	8/22.5D	10/22.5	Ford ECR	6-3½ x 3½	272	7.6	260	178-3800	WG T98A*	4	Tim F104	HF	H	6.2*
C-700	99	153	22000	*5965	8/22.5D	10/22.5	Ford ECV	6-3½ x 3½	272	8.3	262	181-4400	WG T98A*	4	Tim F106N	HF	H	7.2*
	99	153	22000	*5965	8/22.5D	10/22.5	Ford ECR	6-3½ x 3½	272	7.6	260	178-3800	WG T98A*	4	Tim F106N	HF	H	7.2*
C-750	99	153	23000	*6680	9/22.5D	10/22.5	Ford ECS	6-3½ x 3½	302	7.6	299	196-3800	NP 540*	5	Eat 1614	HF	H	7.17*
C-800	99	153	26000	*6960	10/22.5D	11/22.5	Ford ECT	6-3½ x 3½	332	7.6	328	212-3800	Cla 265V*	5	Eat 1790A*	SF	H	7.17*
B-500	154	154	15000	4250	7/22.5D	9/22.5	Ford EBS	6-3½ x 3½	223	8.3	207	139-4200	WG T98A*	4	Tim C100	HF	H	6.2*
	154	154	15000	4250	7/22.5D	9/22.5	Ford ECV	6-3½ x 3½	272	8.3	262	181-4400	WG T98A*	4	Tim D100	HF	H	5.83*
	154	154	15000	4250	7/22.5D	9/22.5	Ford ECR	6-3½ x 3½	272	7.6	260	178-3800	WG T98A*	4	Tim D100	HF	H	5.83*
B-600	192	220	17000	4800	8/22.5D	10/22.5	Ford EBS	6-3½ x 3½	223	8.3	207	139-4200	WG T98A*	4	Tim F106	HF	H	6.8*
	192	220	17000	4800	8/22.5D	10/22.5	Ford ECV	6-3½ x 3½	272	8.3	262	181-4400	WG T98A*	4	Tim F106	HF	H	6.2*
	192	220	17000	4800	8/22.5D	10/22.5	Ford ECR	6-3½ x 3½	272	7.6	260	178-3800	WG T98A*	4	Tim F106	HF	H	6.2*
B-700	245	262	*21000	5695	8/22.5D	10/22.5	Ford ECV	6-3½ x 3½	272	8.3	262	181-4400	WG T98A*	4	Tim F106	HF	H	7.2*
	245	262	*21000	5695	8/22.5D	10/22.5	Ford ECR	6-3½ x 3½	272	7.6	260	178-3800	WG T98A*	4	Tim F106	HF	H	7.2*
B-750	245	262	22000	6185	9/22.5D	10/22.5	Ford ECS	6-3½ x 3½	302	7.6	299	196-3800	NP 540*	5	Eat 1614	HF	H	7.17*
P-350	104	122	8000	2405	7/17.5S	8/17.5	Ford EBT	6-3½ x 3½	223	8.3	207	139-4200	Ford*	3	Spi 60	HF	H	4.86*
	104	122	8000	2405	7/17.5S	8/17.5	Ford ECV	6-3½ x 3½	272	8.3	262	181-4400	Ford*	3	Spi 60	HF	H	4.56*
P-400	137	137	10000	3115	8/17.5S	8/17.5	Ford EBT	6-3½ x 3½	223	8.3	207	139-4200	WG T89C*	3	Tim B100	HF	H	5.14*
	137	137	10000	3115	8/17.5S	8/17.5	Ford ECV	6-3½ x 3½	272	8.3	262	181-4400	WG T89C*	3	Tim B100	HF	H	4.86*
P-500	137	154	15000	3385	8/19.5S	8/22.5	Ford EBT	6-3½ x 3½	223	8.3	207	139-4200	WG T87D*	3	Tim C100	HF	H	6.2*
	137	154	15000	3385	8/19.5S	8/22.5	Ford ECV	6-3½ x 3½	272	8.3	262	181-4400	WG T87D*	3	Tim C100	HF	H	5.83*
T-700	144	192	28000	*7815	8/22.5	9/22.5	Ford ECR	6-3½ x 3½	272	7.6	260	178-3800	NP 540*	5	Eat 22M	SF	H	6.70-7.79
	144	192	28000	*7815	8/22.5	9/22.5	Ford ECR	6-3½ x 3½	272	7.6	260	178-3800	NP 540*	5	Eat 22M	SF	H	6.70-7.79
	144	192	32000	*7815	8/22.5	10/22.5	Ford ECR	6-3½ x 3½	272	7.6	260	178-3800	NP 540*	5	Eat 28M	SF	H	7.07-7.79
	144	192	32000	*7815	8/22.5	10/22.5	Ford ECS	6-3½ x 3½	302	7.6	299	196-3800	NP 540*	5	Eat 28M	SF	H	7.07-7.79
T-750	144	192	37000	*9165	9/22.5	11/22.5	Ford ECT	6-3½ x 3½	332	7.6	328	212-3800	Cla 265*	5	Eat 26M	SF	H	7.79-7.07
T-800	144	192	43000	*9715	10/22.5	11/22.5	Ford ECT	6-3½ x 3½	332	7.6	328	212-3800	Cla 265*	5	Eat 34M	SF	H	8.6-7.8
T-850	144	192	43000	*10120	10/22.5	11/22.5	Ford EDL	6-4½ x 3½	401	7.5	350	226-3800	Spi 4652	5	Eat 34M*	SF	H	6.69-6.6*
	144	192	43000	*10120	10/22.5	11/22.5	Ford EDM	6-4½ x 3½	477	7.5	430	260-3600	Spi 6352	5	Eat 34M*	SF	H	6.69-6.6*
	144	192	43000	*10120	10/22.5	11/22.5	Ford EDM	6-4½ x 3½	477	7.5	490	277-3400	Spi 6352	5	Eat 34M*	SF	H	6.69-6.6*
T-950	156	192	46000	*11405	11/22.5	12/24.5	Ford EDL	6-4½ x 3½	401	7.5	350	226-3800	Spi 4652	5	Eat 38D	SF	H	7.6-6.38*
	156	192	46000															



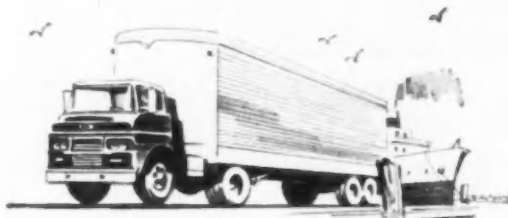
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1958 TRUCK SPECIFICATIONS

Continued from Page 218

MAKE AND MODEL	WHEEL-BASE		Gross Vehicle Weight for Normal Service	Chassis Weight (See definition)	TIRE SIZES		Make and Model	ENGINE DETAILS			TRANSMISSION		REAR AXLE						
	Minimum Standard	Maximum Standard			Standard Front and Rear	Maximum Authorized Tire Size (Dually unless noted)		No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Make and Model	Forward Speeds	Make and Model	Gear and Type	Drive and Torque	Gear Ratio Range in High	
																			D-dual rear S-single rear
Kenworth (D)	4905		33000	10750	10.00/20	11.00/22	Cum JTB	6-41x5	401	16.0	350	180-2400	5A65	12	Tim R200	H2F	H		
(D)	4906		42000	12700	10.00/20	11.00/22									Tim R200+	H2F	H		
(D)	4909		45000	13900	10.00/20	11.00/22									Tim SQW	WF	H		
(D)	4921	153 1/2	255	33000	12600	10.00/20	11.00/22	Cum NHB600	6-51x6	743	16.0	535	220-2100	BL 8241	12	Tim R200P	H2F	H	5.91-8.7
(D)	4921	153 1/2	255	33000	12600	10.00/20	11.00/22	HS 590GV3	6-5x5	590	6.6	490	232-2800	Fu 5-C720	15	Tim R200P	H2F	H	5.91-8.7
(D)	4922	191	255	43000	14100	10.00/20	11.00/22	Cum NHB600	6-51x6	743	16.0	535	220-2100	BL 8241	12	Tim R200P+2F	WF	H	5.91-8.76
(D)	4923-4R	190	255	43000	15200	10.00/20	11.00/22	Cum NHB600	6-51x6	743	16.0	535	220-2100	BL 8241	12	Tim SQW	WF	L	5.67-8.20
(D)	4924-4R	190	255	61000	16400	10.00/20	11.00/22	Cum NHB600	6-51x6	743	16.0	535	220-2100	BL 8241	12	Tim SW456P	WF	L	4.72-6.20
(D)	4925-4R	190	255	43000	14400	10.00/20	11.00/22	Cum NHB600	6-51x6	743	16.0	535	220-2100	BL 8241	12	Tim GSWQFR2	WF	L	5.67-8.20
(D)	4929-4R	175 1/2	255	43000	14200	10.00/20	11.00/22	HS 590GV3	6-5x7	590	6.6	490	232-2800	Fu 5C720	15	Tim SQD	B2F	L	4.68-6.20
(D)	552-5	175	255	54000	22500	13.00/24	13.00/24	Cum NHB600	6-51x6	743	16.0	535	220-2100	BL 8241*	12	Tim SFD4640	B2F	L	8.07-11.5
(D)	848-4R	210 1/2	234	98000	20000	12.00/24	14.00/24	Cum NHB600	6-51x6	743	16.0	535	220-2100	BL 8241	12	Tim SFD4640	B2F	L	8.07-11.5
(D)	849-4R	210 1/2	234	98000	21700	12.00/24	14.00/24	Cum NHB600	6-51x6	743	16.0	535	220-2100	BL 8241*	12	Tim SFD4640	B2F	L	8.07-11.5
(D)	*801	158 1/2		73400	37400	↑	↑	Cu NHB1D600	6-51x6	743	16.0	535	220-2100	Fu 10F1220*	10	Own	H2F	R	** -19.2
(D)	*802	168		94000	45000	↑↑	↑↑	**	6-51x6	743	12.0	800	300-2100	↑↑	Own	H2F	R	** -19.2	
(D)	*802-A	168		94000	45000	↑↑	↑↑	**	6-51x6	743	12.0	800	300-2100	Fu 10F1220	10	Own	H2F	R	** -19.2
(D)	*803	168		140000	68000		18.00/33	Cu NVH1200	12-51x6	* 13.0	6	400-2100	↑	↑	Own	H2F	R		
Peterbilt (D)	280	175	Opt	27000	12500	10.00/20	11.00/22	Cum NHB600	6-51x6	743	17.0	500	200-2100	Spi 8041	12	Tim R230DPA	2F	R	5.91-6.51
(c.o.b.)	281	114	Opt	27000		10.00/20	11.00/22	Cum NHB600	6-51x6	743	17.0	500	200-2100	Spi 8041	12	Tim R230DPA	2F	R	5.91-6.51
	281	165	Opt	27000	10450	10.00/20	11.00/22	Cum NHB600	6-51x6	743	17.0	500	200-2100	Spi 8045	12	Tim R230P	2F	R	5.91-6.51
Reo	F-20-1	125	185	18500	*3355	8/22.5	10/22.5	Own 2550A1	6-31x4 1/2	255	6.7	189	107-3400	WG T98A	4	Tim F140+	HF	H	6.2-7.2
F-20-2	125	185	18500	*3355	8/22.5	10/22.5	Own 2550A1	6-31x4 1/2	255	6.7	189	107-3400	WG T98A	4	Tim F140+	HF	H	6.2-7.2	
F-20-3	125	185	20500	*5575	8/22.5	10/22.5	Own 2550A1	6-31x4 1/2	255	6.7	189	107-3400	WG T98A	4	Tim F140+	HF	H	6.2-7.2	
F-20T	125	185	18500	*6215	8/22.5	10/22.5	Own 2550A1	6-31x4 1/2	255	6.7	189	107-3400	WG T98A	4	Tim F340	Hfd	H	6.16-8.82	
F-22-1	130	185	21000	*6295	10/22.5	11/22.5	Own 2920A4	6-37x4 1/2	292	6.6	224	124-3300	Cla 205V	5	Tim H140+	HF	H	6.16-7.2	
F-22-2	130	185	23000	*6295	10/22.5	11/22.5	Own 2920A4	6-37x4 1/2	292	6.6	224	124-3300	Cla 205V	5	Tim H140+	HF	H	6.16-7.2	
F-22-3	130	185	23000	*6330	10/22.5	11/22.5	Own 2920A4	6-37x4 1/2	292	6.6	224	124-3300	Cla 205V	5	Tim H140+	HF	H	6.16-7.2	
F-22T	130	185	21000	*7895	10/22.5	11/22.5	Own 2920A4	6-37x4 1/2	292	6.6	224	124-3300	Cla 205V	5	Tim H340	Hfd	H	6.16-8.72	
F-22R-1	130	185	23500	*6590	11/22.5	11/24.5	Own 3310A4	6-41x4 1/2	331	6.4	264	140-3200	Cla 205V	5	Tim L140+	HF	H	6.16-7.2	
F-22R-2	130	185	25500	*6590	11/22.5	11/24.5	Own 3310A4	6-41x4 1/2	331	6.4	264	140-3200	Cla 205V	5	Tim L140+	HF	H	6.16-7.2	
F-22R-3	130	185	26000	*6860	11/22.5	11/24.5	Own 3310A4	6-41x4 1/2	331	6.4	264	140-3200	Cla 205V	5	Tim L140+	HF	H	6.16-7.2	
F-22RT	130	185	23500	*7515	11/22.5	11/24.5	Own 3310A4	6-41x4 1/2	331	6.4	264	140-3200	Cla 205V	5	Tim L340	Hfd	H	5.99-8.73	
F-50-1	130	185	29000	*7715	11/22.5	12/22.5	Own OH170*	6-41x4 1/2	331	7.5	297	170-3400	Spi 3152	5	Tim QT140+	HF	H	6.16-7.8	
F-50-2	130	185	31000	*7715	11/22.5	12/22.5	Own OH170*	6-41x4 1/2	331	7.5	297	170-3400	Spi 3152	5	Tim QT140+	HF	H	6.16-7.8	
F-50-3	130	185	31000	*7715	11/22.5	12/22.5	Own OH170*	6-41x4 1/2	331	7.5	297	170-3400	Spi 3152	5	Tim QT140+	HF	H	6.16-7.8	
F-50T	130	185	29000	*6390	11/22.5	12/22.5	Own OH170*	6-41x4 1/2	331	7.5	297	170-3400	Spi 3152	5	Tim QT340+	Hfd	H	6.00-9.01	
F-50D-1 (QT)	130	185	29000	*8815	11/22.5	12/24.5	Cum JT-6-B	6-41x5	401	16.0	412	175-2500	Fu SA650	5	Tim QT140+	HF	H	4.62-6.83	
F-50D-2 (RT)	130	185	31000	*8815	11/22.5	12/24.5	Cum JT-6-B	6-41x5	401	16.0	412	175-2500	Fu SA650	5	Tim QT140+	HF	H	4.62-6.83	
F-50D-2 (QT)	130	185	31000	*8815	11/22.5	12/24.5	Cum JT-6-B	6-41x5	401	16.0	412	175-2500	Fu SA650	5	Tim QT140+	HF	H	4.62-6.83	
F-50D-2 (RT)	130	185	33000	*9110	11/22.5	12/24.5	Cum JT-6-B	6-41x5	401	16.0	412	175-2500	Fu SA650	5	Tim RT140+	HF	H	4.62-6.83	
F-50D-3 (QT)	130	185	31000	*8815	11/22.5	12/24.5	Cum JT-6-B	6-41x5	401	16.0	412	175-2500	Fu SA650	5	Tim QT140+	HF	H	4.62-6.83	
F-50D-3 (RT)	130	185	33000	*9110	11/22.5	12/24.5	Cum JT-6-B	6-41x5	401	16.0	412	175-2500	Fu SA650	5	Tim RT140+	HF	H	4.62-6.83	
F-50D-3 (QT)	130	185	31000	*8815	11/22.5	12/24.5	Cum JT-6-B	6-41x5	401	16.0	412	175-2500	Fu SA650	5	Tim RT140+	HF	H	4.62-6.83	
F-50D-3 (RT)	130	185	33000	*9110	11/22.5	12/24.5	Cum JT-6-B	6-41x5	401	16.0	412	175-2500	Fu SA650	5	Tim RT140+	HF	H	4.62-6.83	
(c.o.b.)	F-50D-3	130	185	29000	*8475	11/22.5	12/24.5	Cum JT-6-B	6-41x5	401	16.0	412	175-2500	Fu SA650	5	Tim QT340	Hfd	H	4.89-7.56
(c.o.b.)	AC-403	108	26000	*8850	11/22.5	11/24.5	Own 3310A4	6-41x4 1/2	331	6.4	264	140-3200	Cla 205V	5	Tim L340	Hfd	H	5.99-8.73	
(c.o.b.)	AC-303	108	26000	*8850	11/22.5	11/24.5	Own OH170*	6-41x4 1/2	331	7.5	297	170-3400	Spi 3152	5	Tim QT340	Hfd	H	6.00-9.01	
(c.o.b.)	A-600	139	29000	*8530	11/22.5	12/24.5	Own OV207*	6-37x4 1/2	390	7.3	354	207-3400	Fu SA65	5	Tim QT140+	HF	H	5.28-7.8	
(c.o.b.)	A-601	139	31000	*8530	11/22.5	12/24.5	Own OV207*	6-37x4 1/2	390	7.3	354	207-3400	Fu SA65	5	Tim QT140+	HF	H	5.28-7.8	
(c.o.b.)	A-602	139	31000	*8545	11/22.5	12/24.5	Own OV207*	6-37x4 1/2	390	7.3	354	207-3400	Fu SA65	5	Tim QT140+	HF	H	5.28-7.8	
(c.o.b.)	A-603	133	29000	*9680	11/22.5	12/24.5	Own OV207*	6-37x4 1/2	390	7.3	354	207-3400	Fu SA65	5	Tim QT140+	HF	H	5.28-7.8	
(c.o.b.)	A-603D	133	29000	*9680	11/22.5	12/24.5	Cum JT-6-B	6-41x5	401	16.0	412	175-2500	Fu SA650	5	Tim QT340	Hfd	H	5.63-9.01	
(c.o.b.)	AC-603	108	29000	*9315	11/22.5	12/24.5	Own OV207*	6-37x4 1/2	390	7.3	354	207-3400	Fu R46	8	Tim QT140+	HF	H	5.63-9.01	
(c.o.b.)	AC-603D	108	29000	*9315	11/22.5	12/24.5	Own OV207*	6-37x4 1/2	390	7.3	354	207-3400	Fu R46	8	Tim QT140+	HF	H	5.63-9.01	
(c.o.b.)	A-607	151	26000	*8180	10/22.5	11/24.5	Own OV207*	6-41x4 1/2	401	16.0	412	175-2500	Fu R46	8	Tim QT140+	HF	H	4.89-7.56	
(c.o.b.)	A-700	139	31000	*8690	11/22.5	12/24.5	Own OV207*	6-37x4 1/2	390	7.3	354	207-3400	Fu SA65	5	Tim RT140+	HF	H	5.28-7.8	
(c.o.b.)	A-701	139	33000	*8690	11/22.5	12/24.5	Own OV207*	6-37x4 1/2	390	7.3	354	207-3400	Fu SA65	5	Tim RT140+	HF	H	5.28-7.8	

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park and handle and garage . . . more economical to operate. And Rambler is tops in resale value, too—year after year. You'll find Rambler the smart fleet buy for 1958!



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Sales and service fleet users, manufacturing companies, many types of business find the Rambler station wagon perfect for their needs. Lots of room for tools, samples and display material.



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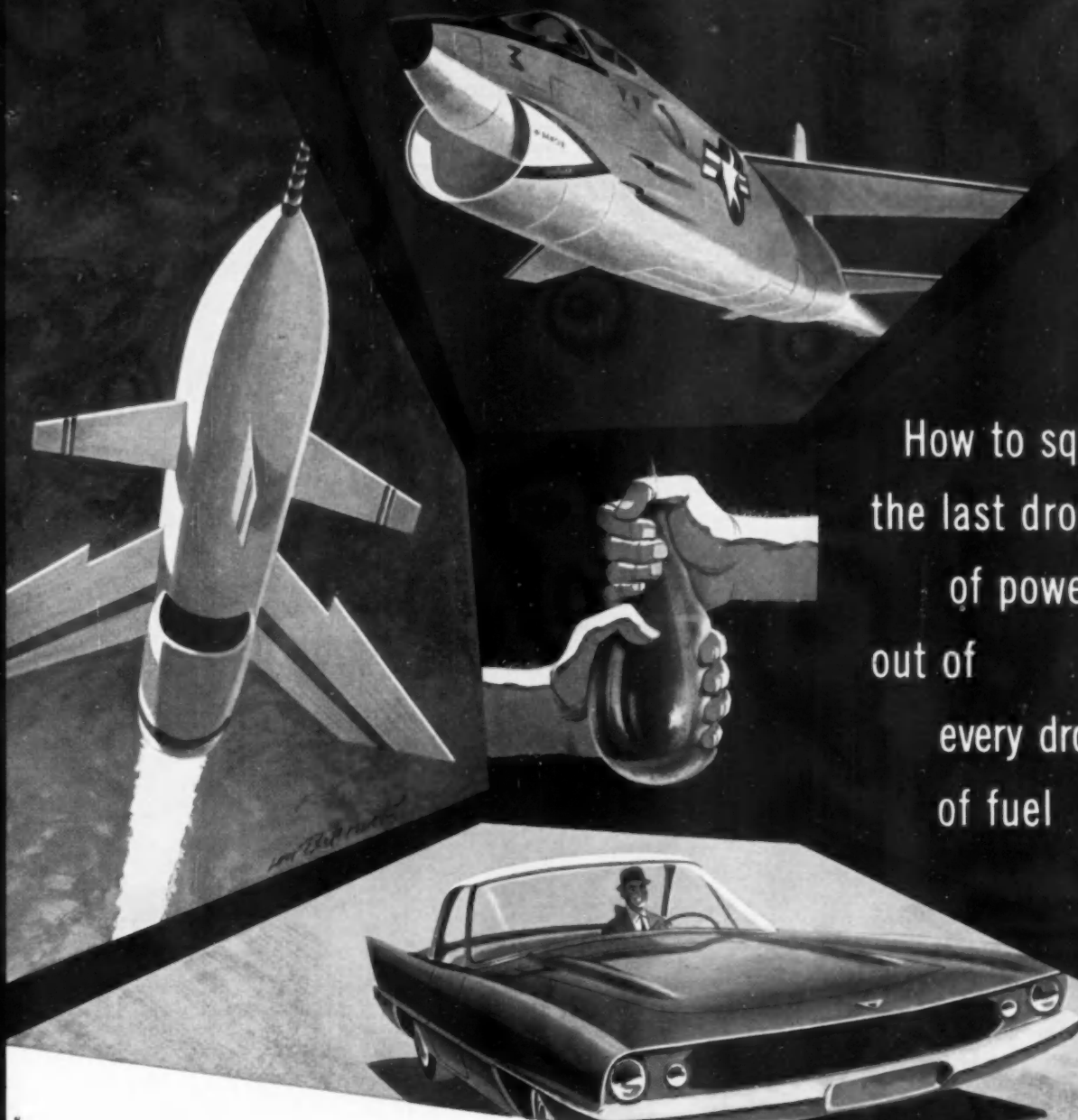
FLEET LEASING ARRANGEMENTS AVAILABLE

If your firm leases fleet units, ask your leasing company for low Rambler rates or write us for the names of leasing companies with whom we have working arrangements.

1958 TRUCK SPECIFICATIONS

Continued from Page 220

MAKE AND MODEL	WHEEL-BASE		Gross Vehicle Weight for Normal Service	Chassis Weight (See definition)	TIRE SIZES		Make and Model	ENGINE DETAILS				TRANSMISSION		REAR AXLE					
	Minimum Standard	Maximum Standard			Standard Front and Rear	Maximum Authorized Tire Size (Duals unless noted)		No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Make and Model	Forward Speeds	Make and Model	Gear and Type	Drive and Torque	Gear Ratio Range in High	
																			Dual rear S-single rear
Ward La Fr.	D-1	149	220	25000	*9500	10.00/20	11.00/20	Con T6427	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	427	5.1	340	152-2600	Ful SA430	5	Tim Q-100	B	R	** -6.83
	D-1C	149	220	29000	*9500	11.00/20	11.00/22	Con T6427	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	427	5.1	340	152-2600	Ful SA430	5	Tim U-200	S2	R	** -7.08
	D-3	149	220	29000	*10000	11.00/20	11.00/22	Con R6572	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	572	5.9	440	189-2600	Ful SC650	5	Tim R-200	S2	R	** -7.84
	D-3S	149	220	29000	*10000	11.00/20	11.00/22	Con R6602	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	602	5.9	463	198-2600	Ful SC650	5	Tim R-200	S2	R	** -7.84
(D)	D-5	149	220	35000	*12500	11.00/22	11.00/22	Cum HB600	6-4 $\frac{1}{2}$ x6	672	17.0	500	150-1800	Ful SC650	5	Tim R-200	S2	R	** -6.42
White-Freightliner (c.o.e.)	WF-42T	115	120		10600	10.00/20		Cum NHB	6-5 $\frac{1}{2}$ x6	743	13.0	575	200-2100	Spi 8041	8	Tim R-330	SFd	H	4.77-6.38
Four-Wheel Drive																			
Coleman	G-55	150	160	34000	12000	11.00/20	12.00/20	Buda LO-525	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	525	6.7	400	150-2200	Fu SA650	5	OW-289-CM	2		7.17-9.72
	G-55	150	160	34000	12000	11.00/20	12.00/20	Wau 140GZ	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	554	6.4	451	188-2600	Fu 4A86	5	OW-289-CM	2		7.17-9.72
(D)	D-55	150	160	34000	13000	11.00/20*	12.00/20	Cum HB600†	6-4 $\frac{1}{2}$ x6	672	17.0	500	150-1800	Fu SA650*	5	OW-289-CM	2		7.17-9.72
Diamond T	723JT	133	211	29500	9800	9.00/20	11.00/20	Cum JT6B	6-4 $\frac{1}{2}$ x5	401		405	175-2500	Fu SA650	5	Eat 18803			
(D)	723CJT	111	189	29500	9450	9.00/20	11.00/20	Cum JT6B	6-4 $\frac{1}{2}$ x5	401		405	175-2500	Fu SA650	5	Eat 18803			
Dodge	L6-W100	108	116	5100	3100	7.17/55	7.17/55	Own	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	230	7.9	202	120-3600	NP 89905	3	Own	H1 $\frac{1}{2}$	H	4.1-4.89
	L6-W100	108	116	5100	3200	7.17/55	7.17/55	Own	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	315	8.1	290	204-4400	NP 89905	3	Own	H1 $\frac{1}{2}$	H	4.1-4.89
	L6-W200	116	116	8000	3275	7.17/55	7.17/55	Own	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	230	7.9	202	120-3600	NP 89905	3	Own	HF	H	4.1-4.89
	L6-W200	116	116	8000	3375	7.17/55	7.17/55	Own	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	315	8.1	290	204-4400	NP 89905	3	Own	HF	H	4.1-4.89
	L6-W300M	126	126	9500	4450	7.50/16S	9.00/16S	Own	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	230	7.9	198	113-3600	NP 420	4	Own	HF	H	4.89-5.83
	L6-W300	129	129	10000	3925	8.19/55	8.17/55	Own	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	251	7.1	216	125-3600	NP 420	4	Spi 70	HF	H	4.88-5.87
	L6-W300	129	129	10000	4000	8.19/55	8.17/55	Own	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	315	8.1	290	204-4400	NP 420	4	Spi 70	HF	H	4.88-5.87
	L6-W500	156	174	20000	6375	8.22/5D	9.22/5	Own	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	265	7.1	228	130-3600	NP 420	4	Tim H141	HF	H	** -6.8
	L6-W500	156	174	20000	6450	8.22/5D	9.22/5	Own	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	315	8.1	290	204-4400	NP 420	4	Tim H141	HF	H	** -6.8
Duplex	L-6602-4	148	220	40000	*13300	11.00/20	12.00/20	Con R6602	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	602	6.1	465	200-2600	Fu SC650	5	Tim 1758	2F	H	** -8.15
	LC-600-4	148	220	40000	*14550	11.00/20	12.00/20	Cum HR600	6-5 $\frac{1}{2}$ x6	743	16.0	540	165-1800	Fu SC650	5	Tim 1758	2F	H	** -8.15
Fabco (c)	FD201A	130	172	19000	5700	7.50/20	9.00/20	Chevrolet	6-3 $\frac{1}{2}$ x3 $\frac{1}{2}$	261	7.2	220	135-4000	Chevrolet*	8	Chevrolet	Hyf	H	** -6.17
(c)	FD201B	130	172	19000	5700	7.50/20	8.25/20	Ford	6-3 $\frac{1}{2}$ x3 $\frac{1}{2}$	239	7.5	215	132-4200	Ford*	10	Ford	HF	H	** -6.8
(c)	FD201B	130	172	19000	5700	7.50/20	8.25/20	Ford	6-3 $\frac{1}{2}$ x3 $\frac{1}{2}$	256	7.5	228	140-3900	Ford*	10	Ford	HF	H	** -6.8
(c)	FD251B	130	172	27000	7500	8.25/20	9.00/20	Ford	6-3 $\frac{1}{2}$ x3 $\frac{1}{2}$	317	7.2	286	170-3900	Ford*	10	Ford	SF	H	7.17-7.67
(c)	FD201A	132	174	17000	6100	8.22/5	10.22/5	Chevrolet	6-3 $\frac{1}{2}$ x3 $\frac{1}{2}$	263	8.0	270	160-4200	Chevrolet*	8	Chevrolet	Hyf	H	** -7.20
(c)	FD201C	131	173	18000	6000	8.22/5	10.22/5	GMC	6-3 $\frac{1}{2}$ x3 $\frac{1}{2}$	347	7.6	317	206-4400	GMC*	8	GMC	Hyf	H	** -6.17
(c)	FD251D	154	172	20000	6500	8.22/5	10.22/5	Int	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	269	6.5	227	103-2800	Int*	10	Tim F105	HF	H	** -6.80
(c)	FD302B	132	192	26000	8000	10.22/5	11.22/5	Ford	6-3 $\frac{1}{2}$ x3 $\frac{1}{2}$	332	7.6	328	212-3800	Ford*	10	Eat 1790	SF	H	** -7.17
Federal	200R44	145	193	22000	*7085	8.25/20		Her JXD	6-4x4 $\frac{1}{2}$	320		254	125-3200	Cia 205V	5	Tim H140	H		** -6.17
(D)	D200R44	145	193	22000	*7485	8.25/20		Con TD6427	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	427		307	116-2400	Cia 290V	5	Tim H140	H		** -6.17
	300R44	145	193	24000	*7370	9.00/20		Her JXD	6-4x4 $\frac{1}{2}$	339		264	138-3000	Cia 205V	5	Tim L140	H		** -6.17
(D)	D300R44	145	193	24000	*7945	9.00/20		Cum JN6B	6-4 $\frac{1}{2}$ x5	401		290	125-2500	Cia 290V	5	Tim L140	H		** -6.17
	400R44	145	193	29000	*10802	10.00/20		Con T6427	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	427		356	179-3000	Cia 290V	5	Tim QT140	H		** -7.20
(D)	D400R44	145	193	29000	*10872	10.00/20		Cum JBS600	6-4 $\frac{1}{2}$ x5	401		350	150-2500	Cia 290V	5	Tim QT140	H		** -7.20
	500R44	145	193	34000	*11280	11.00/22		Con U6501	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	501		413	178-2600	Fu SA65	5	Tim R140	H		** -7.20
(D)	D500R44	145	193	34000	*12440	11.00/22		Cum HRFB600	6-5 $\frac{1}{2}$ x6	743		550	180-2000	Fu SA65	5	Tim H140	H		** -7.20
	600R44	145	193	40000	*12332	11.00/22		Con R6602	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	602		484	232-2800	Fu SA65	5	Tim U200	H2		** -7.20
(D)	D700R44	145	193	40000	*13890	11.00/22		Cum NHB600	6-5 $\frac{1}{2}$ x6	743		535	210-2100	8051A	5	Tim U200	H2		** -7.20
FWD	*140	142	Opt	14500	8200	7.50/20D	10.00/20S	Int BD240	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	240	7.0	223	141-3800	WG-T9	8	Own 13C	SF	H	** -6.17
	U150	130	Opt	14500	8250	7.50/20D	10.00/20S	Int BD240	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	240	7.0	223	141-3800	WG-T9	8	Own 13C	SF	H	** -6.17
	*181	154	Opt	18000	6820	8.25/20D	10.00/20S	Int BD282	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	282	6.5	254	141-3600	Int F51C	5	Own 13C	SF	H	5.67-10.5
	*182	154	Opt	18000	6830	8.25/20D	10.00/20S	Int BD308	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	308	6.5	286	154-3600	Int F51C	5	Own 13C	SF	H	5.67-10.5
	*202	154	Opt	20000	6880	8.25/20D	10.00/20S	Int BD308	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	308	6.5	286	154-3600	Int F51C	5	Own 13C	SF	H	5.67-10.5
	*232	154	Opt	23000	9100	9.00/20D	10.00/20	Int BD308	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	308	6.5	286	154-3600	Int F51C	5	Own 23	SF	H	4.86-8.98
	*233D	154	Opt	23000	9000	9.00/20D	10.00/20	GMC 3-71	3-4 $\frac{1}{2}$ x5	213	16.0	270	102-2100	Ful SA430	5	Own 23	SF	H	4.86-8.98
	*284	154	Opt	28000	8850	10.00/20D	11.00/20	Int RD372	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	372	6.5	309	165-3200	Ful SA43	5	Own 23	SF	H	4.86-8.98
	M284D	161	Opt	28000	8800	10.00/20D	11.00/20	GMC 4-71	4-4 $\frac{1}{2}$ x5	294	0	380	150-2300	Ful SC650	5	Own 23	SF	H	4.86-8.98
	M284	154	Opt	28000	8850	10.00/20D	11.00/20	Int RD372	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	372	6.5	309	165-3200	Ful SA43	5	Own 23	SF	H	4.86-8.98
	*284D	154	Opt	28000	8800	10.00/20D	11.00/20	GMC 4-71	4-4 $\frac{1}{2}$ x5	294	17.0	380	150-2300	Ful SC650	5	Own 23	SF	H	4.86-8.98
	*285	154	Opt	28000	8880	10.00/20D	11.00/20	Int RD406	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	406	6.5	338	175-3200	Ful SA65	5	Own 23	SF	H	4.86-8.98
	*285D	154	Opt	28000	9750	10.00/20D	11.00/20	Cum JT6B	6-4 $\frac{1}{2}$ x5	401	16.0	407	175-2500	Ful SC650	5	Own 23	SF	H	4.86-8.98
	M285	161	Opt	28000	8980	10.00/20D	11.00/20	Int RD406	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	406									



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1958 TRUCK SPECIFICATIONS

Continued from Page 222

MAKE AND MODEL	WHEEL-BASE		Gross Vehicle Weight for Normal Service	Chassis Weight (See definition)	TIRE SIZES		ENGINE DETAILS					TRANSMISSION		REAR AXLE					
	Minimum Standard	Maximum Standard			Standard Front and Rear	Maximum Authorized Tire Size (Duals unless noted)	Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Make and Model	Forward Speeds	Make and Model	Gear and Type	Drive and Torque	Gear Ratio Range in High	
Four-Wheel Drive—Cont'd																			
Marmen-Herr—Cont'd																			
M604	130	192	21000	*5464	8/22.5D	10/22.5	Ford	8-3 1/2 x 3 1/2	272	8.3	262	181-4400	Ford†	4	Ford	HF	H	** -6.8	
M604	130	192	21000	*5464	8/22.5D	10/22.5	Ford	8-3 1/2 x 3 1/2	272	7.6	260	178-3800	Ford†	4	Ford	HF	H	** -6.8	
M704	132	192	22500	*6753	8/22.5D	10/22.5	Ford	8-3 1/2 x 3 1/2	272	7.6	260	178-3800	Ford†	4	Ford	HF	H	** -7.17	
M754	132	192	24000	*7003	9/22.5D	10/22.5	Ford	8-3 1/2 x 3 1/2	302	7.6	299	196-3800	Ford	5	Ford	HF	H	** -7.17	
M804	132	192	26000	*7812	10/22.5D	11/22.5	Ford	8-3 1/2 x 3 1/2	332	7.6	328	212-3800	Ford	5	Ford	HF	H	** -7.17	
M904	132	192	29000	*7840	11/22.5D	12/22.5	Ford	8-3 1/2 x 3 1/2	332	7.6	328	212-3800	Ford	5	Ford	HF	H	** -7.17	
(Sc. Bus Ch.)	45C	178 1/2	178	24000	7840	9.0/20D	10.0/20	Ford ECT2V	8-3 1/2 x 3 1/2	332	7.5	318	200-3800		5		HF	H	6.8 -7.2
(Sc. Bus Ch.)	55C	205	205	24000	7900	9.0/20D	10.0/20	Ford ECT2V	8-3 1/2 x 3 1/2	332	7.5	318	200-3800		5		HF	H	6.8 -7.2
(Sc. Bus Ch.)	55C	233	233	24000	7970	9.0/20D	10.0/20	Ford ECT2V	8-3 1/2 x 3 1/2	332	7.5	318	200-3800		5		HF	H	6.8 -7.2
(Sc. Bus Ch.)	45C	178	178	24000	7840	9.0/20D	10.0/20	Ford ECT4V	8-3 1/2 x 3 1/2	332	7.5	328	212-3800		5		HF	H	6.8 -7.2
(Sc. Bus Ch.)	55C	205	205	24000	7900	9.0/20D	10.0/20	Ford ECT4V	8-3 1/2 x 3 1/2	332	7.5	328	212-3800		5		HF	H	6.8 -7.2
(Sc. Bus Ch.)	55C	233	233	24000	7970	9.0/20D	10.0/20	Ford ECT4V	8-3 1/2 x 3 1/2	332	7.5	328	212-3800		5		HF	H	6.8 -7.2
Oshkosh																			
W-216	152	205	23600	8915	10/22.5	11/22.5	Int RD406	6-4 1/2 x 4 1/2	406	6.5	338	164—	Own	5	Own 216	HF	H	** -6.20	
W-316	152	205	28000	9310	10/22.5	11/22.5	Int RD406	6-4 1/2 x 4 1/2	406	6.5	338	164—	Own	5	Own 316	HF	H	** -6.20	
W-416	152	205	30000	10000	11/22.5	12/22.5	Int RD406	6-4 1/2 x 4 1/2	406	6.5	338	164—	Own	5	Own 416	HF	H	** -6.20	
W-516	152	205	32000	10740	12/22.5	12/22.5	Int RD450	6-4 1/2 x 4 1/2	450	6.2	368	174—	Own	5	Own 516	HF	H	** -6.20	
W-616	152	205	36000	11180	12/22.5	12/22.5	Int RD501	6-4 1/2 x 4 1/2	501	6.5	444	200—	Own	5	Own 616	HF	H	** -6.20	
W-514-D	150	205	30000	10300	10.0/20D	11.0/20	Cum JT68	6-4 1/2 x 5	401		407	175-2500	Own W514	5	Own W514	HF	H	** -7.2	
W-1700-15-C	160 1/2	205	34000	12300	11.0/20D	12.0/20	Cum R6513	6-4 1/2 x 5 1/2	513		427	190-2600	O. W1700-15	10	O. W1700-15	SF	H	** -7.15	
W-1700-15-CR	161 1/2	205	34000	12300	11.0/20D	12.0/20	Cum R6513	6-4 1/2 x 5 1/2	513		427	190-2600	O. W1700-15	10	O. W1700-15	SF	H	** -7.27	
W-814	150	205	38000	12600	11.0/20D	12.0/20	Cum R6572	6-4 1/2 x 5 1/2	572		484	210-2600	Own W814	5	Own W814	SF	H	** -7.1	
W-816	150	205	38000	12600	11.0/20D	12.0/20	Cum R6602	6-4 1/2 x 5 1/2	602		484	210-2600	Own W816	5	Own W816	SF	H	** -7.1	
W-824	150	205	38000	12600	11.0/20D	12.0/20	Cum R6572	6-4 1/2 x 5 1/2	572		484	210-2600	Own W824	5	Own W824	2F	H	** -7.2	
W-825	150	205	38000	12600	11.0/20D	12.0/20	Cum R6602	6-4 1/2 x 5 1/2	602		484	210-2600	Own W825	5	Own W825	2F	H	** -7.2	
W-816	150	205	36000	14100	12.0/20D	12.0/20	Cum HB600	6-4 1/2 x 6	672		500	150-1800	Own W816	5	Own W816	SF	H	** -5.6	
W-826	150	205	38000	14300	12.0/20D	12.0/20	Cum HB600	6-4 1/2 x 6	672		500	150-1800	Own W826	5	Own W826	2F	H	** -5.6	
W-817	158	205	40000	14400	12.0/20D	14.0/20S	Cum HRFB600	6-5 1/2 x 6	743		550	180-2000	Own W817	5	Own 817	SF	H	** -5.4	
W-827	158	205	40000	14600	12.0/20D	14.0/20S	Cum HRFB600	6-5 1/2 x 6	743		550	180-2000	Own W827	5	Own 827	2F	H	** -5.4	
(D)	WA-908	160	205	42000	*18600	13.0/20D	Cum HRFB600	6-5 1/2 x 6	743		550	180-2000	Own WA908	12	Own WA908	2F	H	** -6.15	
W-2211	160	205	44000	*18500	13.0/20D	14.0/20S	Wau 145GBK	6-5 1/2 x 6	779		580	240-2400	Own W2211	12	Own W2211	2F	H	** -6.15	
W-2208	160	205	44000	*19000	13.0/24D	14.0/24	HS 1091G	6-5 1/2 x 7	960		330-2000	Own W2208	10	Own W2208	2F	H	** -6.3		
(D)	WA-2208	160	205	44000	*18900	13.0/20D	Cum NHB600	6-5 1/2 x 6	743		550	200-2100	Own WA2208	12	Own WA2208	2F	H	** -6.15	
(D)	W-2209	160	205	44000	*19500	13.0/24D	Cum NHR5600	6-5 1/2 x 6	743		618	300-2100	Own W2209	10	Own W2209	2F	H	** -6.30	
Walter (c.f.)																			
FZM	126	150	24000	9000	12.0/20S		Wau MZA	6-4 1/2 x 4 1/2	404	5.6	290	125-2600	Own FJN	6	Own MS	2	H	** -8.00	
(c.f.)	AEB	126	150	36000	13000	12.0/24S	Wau 140GZ	6-4 1/2 x 5 1/2	554	6.2	440	165-2250	Own FC	6	Own FCC	2	H	** -9.00	
(c.f.)	AGR	138	162	42000	15600	12.0/24S	Wau 145GBK	6-5 1/2 x 6	779	6.2	585	240-2400	Own FA	6	Own FCC	2	H	** -9.00	
(c.f.)	AGB	138	162	35000	14900	12.0/24D	Wau 145GBK	6-5 1/2 x 6	779	6.2	585	240-2400	Own FA	6	Own FCR	2	H	** -9.00	
Ward La France																			
FD1			35000	*11500	11.0/22	11.0/22	Cont 6513	6-4 1/2 x 5 1/2	513	5.9	405	180-2800	Ful SA620	5	Tim R462W	S2	R	** -8.15	
(D)	FD2		35000	*12000	11.0/24	11.0/24	Cum HB600	6-5 1/2 x 6	672	17.0	500	150-1800	Ful SA920	5	Tim R462W	S2	R	** -8.15	
Willis																			
F4-134-4x4	104 1/2	104	4500	1850	7.0/15S	7.0/15S	Own	4-3 1/2 x 4 1/2	134	6.9	114	72-4000	WG T90C	3	Spl 2201-4	H 1/2	H	** -5.38	
F4-134-4x2	104 1/2	104	4500	1701	6.7/15S	7.0/15S	Own	4-3 1/2 x 4 1/2	134	7.4	111	75-4000	WG T96*	3	Spl 2201-3	H 1/2	H	** -6.89	
F4-134-4WD	118	118	8000	1800	7.0/15S	7.0/15S	Own	4-3 1/2 x 4 1/2	134	9	114	72-4000	WG T90C	3	Spl 2153-1	H 1/2	H	** -6.89	
L6-226-4x4	104 1/2	104	4500	1963	7.0/15S	7.0/15S	Own	6-3 1/2 x 4 1/2	226	6.9	190	105-3600	WG T90J	3	Spl 2201-5	H 1/2	H	** -4.27	
L6-226-4x2	104 1/2	104	4500	1814	6.7/15S	7.0/15S	Own	6-3 1/2 x 4 1/2	226	6.9	190	105-3600	WG T86J	3	Spl 2201-5	H 1/2	H	4.27-4.89	
L6-226-4WD	118	118	6000	2127	7.0/16S	7.0/16S	Own	6-3 1/2 x 4 1/2	226	6.9	190	105-3600	WG T90J	3	Spl 2199-4	H 1/2	H	** -4.88	
CJ-3B	80 1/2	80 1/2	3500	1836	6.0/16S	6.0/16S	Own	4-3 1/2 x 4 1/2	134	6.9	114	72-4000	WG T98A	4	Spl 2231-1	H 1/2	H	** -5.38	
CJ-5	81	81	3750	1867	6.0/16S	6.0/16S	Own	4-3 1/2 x 4 1/2	134	6.9	114	72-4000	WG T98A	4	Spl 2231-1	H 1/2	H	** -5.38	
CJ-6	101	101	3900	1916	6.0/16S	6.0/16S	Own	4-3 1/2 x 4 1/2	134	6.9	114	72-4000	WG T98A	4	Spl 2231-1	H 1/2	H	** -5.38	
DJ-3A	80 1/2	80 1/2	2600	1458	6.4/15S	6.4/15S	Own	4-3 1/2 x 4 1/2	134	6.3	105	60-4000	WG T98A	4	Spl 2216-1	H 1/2	H	** -4.56	
FC-150	81	81	5000	1955	7.0/15S	7.0/15S	Own	4-3 1/2 x 4 1/2	134	6.9	114	72-4000	WG T90A	3	Spl 2231-1	H 1/2	H	** -5.38	
FC-170	103 1/2	103 1/2	7000	2188	7.0/16S	7.0/16S	Own	6-3 1/2 x 4 1/2	226	6.9	190	105-3600	WG T90A	3	Spl 2285-1	H 1/2	H	4.27-6.38	
Six-Wheelers																			
Diamond T																			
730C	133	211	29500	8950	10.0/20	11.0/22S	Own XL450	6-4 1/2 x 5	481		388	174-2800	Cla 282VO	5	Est 18803		R		
730C	99	189	29500	8500	10.0/20	11.0/22S	Own XL450	6-4 1/2 x 5	451		388	174-2600	Cla 282VO	5	Est 18803		R		
830C	145	211	30000	8700	10.0/20	11.0/22S	Own XL501	6-4 1/2 x 5 1/2	501		444	212-3000	Fu SA650	5	Est 18803		R		
830C	99	189	30000	8600	10.0/20	11.0/22S	Own XL501	6-4 1/2 x 5 1/2	501		444	212-3000	Fu SA650	5	Est 18803		R		
(D)	831	145	211	30000	8300	10.0/20D	HS 590	6-5 x 5	590		501	239-2800	Spl 6452	5	Est 18803	S	Opt		
(D)	821	145	211	31500	11000	9.0/20D	Cum HB600	6-4 1/2 x 6	672		480	150-1500	Spl 6452	5	Est 18803		R		
(D)	821R	145	211	31500	11700	9.0/20D	Cum HRFB	6-5 1/2 x 6	743		579	190-2000	Fu 10B1120	10	Tim R140P		R		
(D)	821N	145	211	31500	11800	9.0/20D	Cum NHB6	6-5 1/2 x 6	743		604	220-2100	Fu 10B1120	10	Tim R140P		R		
(D)	8																		

BLOOD BROTHERS Universal Joints

"get the power through" to make
our highways come sooner . . .



CATERPILLAR



INTERNATIONAL



MICHIGAN



TRACTOMOTIVE

It's a rough, tough, shock-and-strain life for the average 'dozer and loader. But machines like these are ready for it. Part by part, they've had long life engineered right in from the start.

Blood Brothers Universal Joints, for example, are one of the rugged, dependable components you'll find . . . selected for their field-proved ability to withstand punishment.

On these machines—and many other kinds of road-building equipment—Blood Brothers Universal Joints "get the power through" dependably. It's one of their vital functions to help make our highways come sooner.

If you build heavy-duty equipment, write for Bulletin 557—or call on our engineers for suggestions.



ROCKWELL SPRING AND AXLE CO.

Blood Brothers Machine Division

ALLEGAN, MICHIGAN

UNIVERSAL JOINTS
AND DRIVE LINE
ASSEMBLIES

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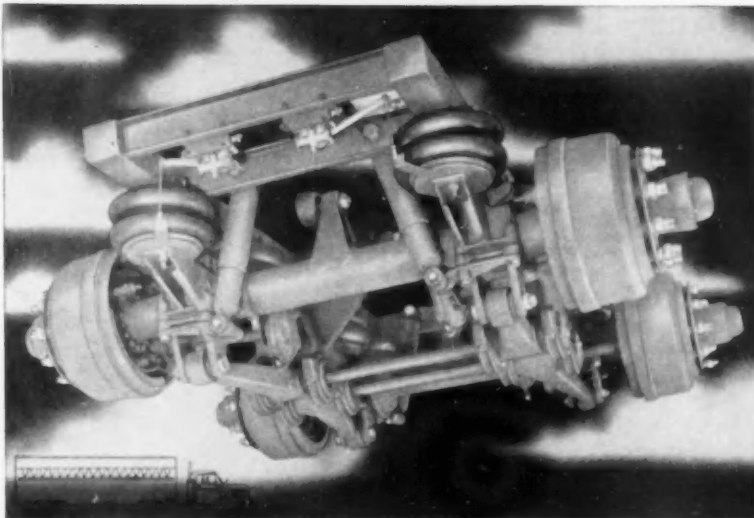
Continued from Page 224

COMMERCIAL CAR JOURNAL, April, 1958

TORQUE TALK

FROM

**CLARK®
EQUIPMENT**



TONS OF CARGO FLOAT ON AIR with new Clark Air Suspension System for highway semi-trailers

Damage to fragile highway cargo or empty trailers in transit can now be virtually eliminated. Key is Clark Air Suspension. In this new system, doughnut-shaped "air-springs" carry full weight of trailer and cargo. A gentle cushion of air absorbs road shock, literally "floats" cargo and trailer over the bumps with a ride approaching passenger car softness. Empty, for example, a Clark Air-Suspended trailer develops a spring frequency of only 95 cycles per minute; loaded, only 89 cycles per minute.

Lateral roll and sway are minimized by an ingenious system of pivoted torque arms and torsion bars which take the full force of side loads and absorb torsion resulting from brake torque. Trailer loads need no longer be precisely balanced. Offset loading is ac-

commodated by a system of automatic air valving, which feeds and bleeds the air springs to keep the trailer bed level at all times. When loading or unloading trailer, air reservoirs automatically adjust to support bed at normal running height.

A safety pressure regulator valve, on the line leading from the truck's compressor, is designed to shut off at 60 psi...leaving ample air pressure for the service brake system.

Clark Air Suspension assemblies come as complete packages, ready for installation on new or in-use semis, in single and tandem units. Other advantages include lower trailer maintenance costs and substantial weight reduction possibilities for trailer manufacturers.

FOR YOUR READING RACK

NEW AUTOMOTIVE BOOKLET

Dramatic portrayal, in 24 pages, of Clark's basic line of automotive components. Includes illustrations of the Clark constant mesh and synchronized transmissions, TransVerter, StepMatic, power-shift transmissions, torque converters, agricultural units; also automotive driving and steering axles; planetary, industrial and trailer axles; air suspension assemblies; rear axle housings and electric steel castings.

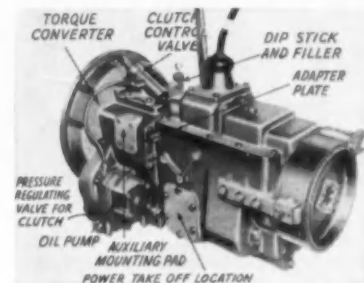
CLARK FULL-LINE BOOKLET

A 48-page, full-color booklet in handy pocket size is your condensed guide to the entire product line of Clark Equipment Company. Automotive components, materials-handling equipment, construction machinery—all are described in concise detail. Basic information on the eight Clark plants and brief insight into corporate philosophy make this booklet a "must" for your reading rack.

NEW POWER TRAIN DESIGNED FOR STOP & GO OPERATION

Designed specifically for off-highway and stop-go operations, Clark Equipment Company's new TransVerter is ideal for such equipment as house-to-house delivery trucks, buses, garbage trucks and various types of construction machinery. Rated for engine torque output up to 325 lb-ft, the TransVerter power train package consists of a torque converter, hydraulic disconnect clutch and standard transmission. Because of its compactness—only 8 inches longer than a conventional transmission and clutch—the TransVerter can often be installed by the original equipment manufacturer without major re-design of his line.

Operational advantages of the new Clark power train include elimination of engine stalling and lugging . . . sharp reduction in gear shifting, to the point where most work can be performed in the same gear . . . fine inching control, simply by working the throttle. Provision is made for SAE power-



take-off attachments, to be driven by the torque converter. The hydraulic disconnect clutch is an off-on type unit that does not require "letting in" or "easing." A variety of clutch releases can be provided, including a shift lever button or a conventional-looking pedal raised slightly from the floorboard.

For Further Information

. . . and full details on any of Clark's automotive components, simply address a card or a call to:

CLARK EQUIPMENT COMPANY

AUTOMOTIVE DIVISION
Buchanan or Jackson 3, Michigan

TransVerter and StepMatic are trade-marks of Clark Equipment Company

Just out! The newest in pickups!



NEW FLEETSIDE

Here's the new sweetheart of the Task-Force fleet, Chevrolet's new Fleetside pickup! No truck has ever been better to look at . . . or better for your business.

Long, sweeping lines, graceful body contours . . . new truck appearance that's fleet, dashing and completely modern! Yet there's even more to the new Chevrolet Fleetside than the striking beauty that first meets your eye. There's *size*, for instance: extra room inside to pack many additional cubic feet of

payload. In lengths of either 78 inches or 98* inches and a full six feet in width, this new body actually provides 50% more cubic capacity than the conventional pickup box!

And with an extra-sturdy build—the result of features like double-walled lower side panels, durable hardwood floor and solidly constructed full-width tailgate—the new Fleetside is the toughest of pickup bodies, made to stand up under a steady pounding. A new adjustable latch keeps graintight tailgate free from rattles.

Here's a new high in hard-working utility matched by styling that stands out on any street and speaks volumes about both you and your business. See and try the latest in pickups, the new Chevrolet



CHEVROLET

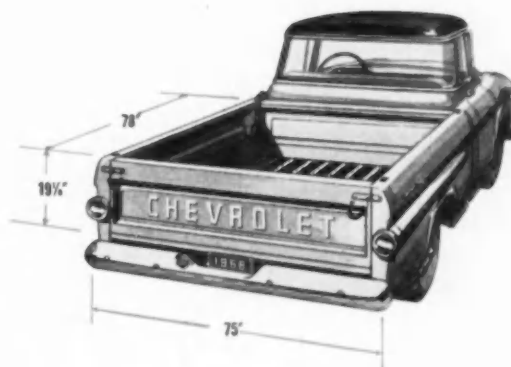


Fleetside, at your Chevrolet dealer's now! . . .
Chevrolet Division of General Motors, Detroit 2,
Michigan.

**Optional at extra cost.*

More load space than any other comparable low-priced pickup. Up to 75.6 cubic feet of load space to pack bigger cargoes and help you get more done each day. The new Fleetside body is so wide you can haul standard 4' x 8' sheets of building material and still have room along the sides for extra items of payload!

Plenty of work-whipping hustle and muscle. Your choice of two great engines that know how to save—standard 145-h.p. Thriftmaster 6 or optional at extra cost 160-h.p. Trademaster V8. And Fleetside chassis components are truck-engineered down to the last bolt; they'll take all the abuse your most bruising hauls can give them!



TASK • FORCE TRUCKS

1958 BUS SPECIFICATIONS

Line Number	BUS MAKE AND MODEL	GENERAL							ENGINE										Oiling System			
		Passenger Rating	Type (City Service, Parlor, etc.)	Standard Wheelbase (In.)	Overall Length (In.)—Bumper to Bumper	Inside Length (In.)—Passenger Compartment	Tread (In.)—Front and Rear	Complete Vehicle Weight—Dry (Lb.)	Standard Tire Size (In.)—Front and Rear	Make and Model	Cycle and Fuel	Location	Number of Cylinders—Bore and Stroke (In.)	Displacement (Cu. In.)	Rated Horsepower (A.M.A.)	Maximum Brake Hp. at Governed R.P.M.	Maximum Net Torque (Lb. Ft.) at Specified R.P.M.	Compression Ratio—1	Compression Pressure (Lb.) at Specified R.P.M.	Valve Arrangement	Pressure to —	
1	Crown	A-501-10	37-41	IC	200	384	353	80 1/4-72	18500	10.00/20	Int. 501	4-G	UF	6-4 1/2 x 5 1/4	501	48.6	212-3000	445-1400	6.50	1	acdef	
2		A-590-10	33-41	IC	200	384	353	80 1/4-72	18500	10.00/20	HS. 590BH1	4-G	UF	6-5 x 5	590	60.0	232-2800	490-1600	6.70	1	acdef	
3		A-501-11	37-45	IC	232	419	388	80 1/4-72	19200	11.00/20	Int. 501	4-G	UF	6-4 1/2 x 5 1/4	501	48.6	212-3000	445-1400	6.50	1	acdef	
4		A-590-11	37-45	IC	232	419	388	80 1/4-72	19200	11.00/20	HS. 590BH1	4-G	UF	6-5 x 5	590	60.0	232-2800	490-1600	6.70	1	acdef	
5		A-775-11	37-45	IC	232	419	388	80 1/4-72	20500	11.00/22	HS. 779	4-G	UF	6-5 1/2 x 6	779	29.8	254-2400	618-1600	6.10	1	acdef	
6		AD-743-11	37-45	IC	232	419	388	80 1/4-72	21200	11.00/22	Cum. NHHB600	4-D	UF	6-5 1/2 x 6	743	27.0	210-2100	570-1600	15.5	1	abcd	
7		AD-743-T-11	37-45	P	232	419	388	80 1/4-72	21200	11.00/22	Cum. NHHB600	4-D	UF	6-5 1/2 x 6	743	250-2100	680-1500	15.5	1	abcd		
8	Fitzjohn	Roadrunner	33	P	201	384	324	80 1/4-71 1/2	17650	10.00/20	Wau. 140GKB	4-G	R	6-4 1/2 x 5 1/4	525	46.6	177-2800	125-1000	6.50	1	abcdfg	
9		Roadrunner	33	P	201	384	324	80 1/4-71 1/2	17750	10.00/20	Cum. JBS600	4-D	R	6-4 1/2 x 5	401	40.8	150-2500	360-1500	15.5	1	abcd	
10		Roadrunner	37	P	237	420	360	80 1/4-71 1/2	17650	11.00/20	Wau. 140GKB	4-G	R	6-4 1/2 x 5 1/4	525	46.6	177-2800	125-1000	6.50	1	abcdfg	
11		Roadrunner	37	P	237	420	360	80 1/4-71 1/2	18750	11.00/20	Cum. JTB6	4-D	R	6-4 1/2 x 5	401	40.8	165-2500	400-1500	15.5	1	abcd	
12	Flexible	218WA1	29	IC	218	410 1/2	300	80 1/4-69 1/4	16100	9.00/20	Whi. WA390	4-G	R	6-4 1/2 x 5	531	54.2	200-2900	440-1400	6.40	1	abcd	
13		218GM1	29	IC	218	410 1/2	300	80 1/4-69 1/4	16100	9.00/20	GM. 4-71	2-D	R	4-4 1/2 x 5	284	28.9	150-2100	387-1600	16.0	1	abcd	
14		228JT1-56	37	IC	228	419 1/2	401 1/2	80 1/4-71 1/2	18200	10.00/20	Cum. JT600	4-D	R	6-4 1/2 x 5	401	43.3	175-2500	405-1600	15.5	1	abcd	
15		228F1-56	37	IC	228	419 1/2	401 1/2	80 1/4-71 1/2	18200	10.00/20	Fag. FTC200	4-G	R	6-4 1/2 x 5	451	45.9	200-2900	400-1600	7.28	155-250	1	abcd
16	Flexible-Twin Coach	FT-33	40	CS	222	403	378	80 1/4-72	15800	10.00/20	Fag. FTC-200	4-G	UF	6-4 1/2 x 5	451	45.9	200-2900	400-1600	7.28	1	abcd	
17		FT-35	44	CS	232 1/2	420	402	80 1/4-72	16600	10.00/20	Fag. FTC-200	4-G	UF	6-4 1/2 x 5	451	45.9	200-2900	400-1600	7.28	1	abcd	
18		FT-40	52	CS	274 1/2	480	462	80 1/4-72	18500	11.00/20	Fag. FTC-210	4-G	UF	6-4 1/2 x 5 1/4	477	48.6	210-2800	480-1600	7.09	1	abcd	
19		FT-40DL	52	CS	274 1/2	480	462	80 1/4-72	18500	11.00/20	Fag. FLDH600	4-D	UF	6-4 1/2 x 5 1/4	507	55.5	160-2225	455-1200	15.8	450-300	1	abcd
20	G.M.C.	TGH3102	31	CS	180 1/2	325 1/2	287	81 1/4-75 1/4	9635	8.25/20	Own. 270	4-G	TR	6-3 1/2 x 4	270	34.3	124-3200	232-1000	7.75	165-1000	1	abcdfgh
21		TDH3714	37	CS	210 1/2	369 1/2	336	79 1/4-70 1/2	15375	10.00/20	Own. 4-71	2-D	TR	4-4 1/2 x 5	294	28.9	143-2100	344-1600	17.0	385-500	1	abcdfgh
22		TDH4512	45	CS	238 1/2	420	389	78 1/4-70 1/2	17050	10.00/20	Own. 6-71	2-D	TR	6-4 1/2 x 5	426	43.4	172-2000	472-1200	17.0	385-500	1	abcdfgh
23		TDM4515	45	Sub	238 1/2	420	389	78 1/4-70 1/2	19055	10.00/20	Own. 6-71	2-D	TR	6-4 1/2 x 5	426	43.4	172-2000	472-1200	17.0	385-500	1	abcdfgh
24		TDH5105	51	CS	281 1/2	477	441	80 1/4-70 1/2	18620	11.00/20	Own. 6-71	2-D	TR	6-4 1/2 x 5	426	43.4	172-2000	472-1200	17.0	385-500	1	abcdfgh
25		TDH5106	51	CS	281 1/2	477	441	80 1/4-70 1/2	18270	11.00/20	Own. 6-71	2-D	TR	6-4 1/2 x 5	426	43.4	172-2000	472-1200	17.0	385-500	1	abcdfgh
26		TDM5108	51	Sub	281 1/2	477	441	80 1/4-70 1/2	20615	11.00/20	Own. 6-71	2-D	TR	6-4 1/2 x 5	426	43.4	211-2000	574-1600	17.0	385-500	1	abcdfgh
27		PD4104	41	P	261	420	390	78 1/4-70 1/2	19425	11.00/20	Own. 6-71	2-D	TR	6-4 1/2 x 5	426	43.4	211-2000	574-1600	17.0	385-500	1	abcdfgh
28	Mack	C-41	41	CS	237 1/2	396	366 1/2	79 1/4-70 1/2	18000	10.00/20	Own. END673	4-D	TR	6-4 1/2 x 6	672	57.0	170-2100	480-1200	16.6	530-1000	1	acdefh
29		C-47	45	CS	261 1/2	420	390 1/2	79 1/4-70 1/2	18500	10.00/20	Own. END673	4-D	TR	6-4 1/2 x 6	672	57.0	170-2100	480-1200	16.6	530-1000	1	acdefh
30		C-49	51	CS	289 1/2	472 1/2	443	79 1/4-70 1/2	20250	11.00/20	Own. END673	4-D	TR	6-4 1/2 x 6	672	57.0	170-2100	480-1200	16.6	530-1000	1	acdefh
31		8700	41	IC	245 1/2	420	390	80 1/4-71 1/2	20700	11.00/20	Own. END7673	4-D	TR	6-4 1/2 x 6	672	57.0	205-2100	560-1500	16.6	550-1000	1	acdefh
32	Southern Coach	S-45-DHC	45	CS	232 1/2	419	404	80 1/4-72	18714	11.00/22	Cum. NHHB600	4-D	UF	6-5 1/2 x 6	743	63.0	200-2100	535-1200	15.5	1	abcd	
33		S-36-DHL	36	CS	194 1/2	356 1/2	341 1/2	80 1/4-71 1/2	14460	10.00/20	Fag. FLDH600	4-D	UF	6-4 1/2 x 5 1/4	597	55.2	160-2400	452-1200	15.8	1	abcdfg	
34		S-41-HF	41	CS	221 1/2	391	377 1/2	80 1/4-72	15300	11.00/20	Fag. FTC180	4-G	UF	6-4 1/2 x 4 1/2	404	43.4	160-2400	390-1600	7.50	1	acdf	
35		S-50-DHC	50	CS	275 1/2	461 1/2	447	86 1/4-72	21310	11.00/22	Cum. NHHB600	4-D	UF	6-5 1/2 x 6	743	63.0	200-2100	535-1200	15.5	1	abcd	
36		R-37	33	CS	182 1/2	356 1/2	316 1/2	80 1/4-71 1/2	14530	10.00/20	Int. RD450	4-G	R	6-4 1/2 x 5	451	45.9	182-3000	388-1600	6.50	388-1600	1	abcd

ABBREVIATIONS

- 4—Two used.
- T—Torque converter.
- G—Generator, Delco-Remy; starter, Auto-Lite.
- 1—Front, 14 1/2; rear, 15.
- H—Hundred rpm.
- A—Air suspension.

- 1—EN510A propane engine optional.
- 2—EN510A propane and ENDT673 diesel engines optional.
- 3—Four speed mechanical transmission optional.
- 4—10 or 12 also available.
- a—Main bearings.
- b—Wrist pins.
- c—Connecting rods.

- d—Camshaft.
- e—Accessory drive.
- f—Valve lifters or rocker arms and shafts.
- g—Timing gears or chain.
- h—Air compressor.
- i—Balancer shaft.
- A—Air.
- AL—Electric Auto-Lite Co.
- BL—Brown-Lipe.

- Bos—American Bosch Div.
- Ce—Centrifugal.
- CIG—City and intercity service.
- Cl—Clark Equipment Co.
- CS—City service.
- Cum—Cummins Engine Co.
- D—Diesel fuel.
- Do—Downdraft.
- DR—Delco-Remy Div.

TRANSPORTATION ENGINEERING FORMULAS

HORSEPOWER

Maximum Net Horsepower (maximum gross horsepower less power consumed by engine accessories) is the only horsepower that should be used in transportation engineering formulas, and can be determined only by using a dynamometer or may be procured from the manufacturer

DRAWBAR PULL

$$DP = \frac{.90 \times \text{lb. in Torque} \times \text{FGR}}{R} \times .012 \text{GVW}$$

DP = Drawbar Pull
R = Rolling Radius in Inches
FGR = Final Gear Ratio
GVW = Gross Vehicle Weight
.90 = Efficiency for all rear axles except worm, then use .85
lb. in Torque = 12 times Torque in lb. ft.
.012 = 12 lb. per 1000 lb. Rolling Resistance

TORQUE AT PEAK HP

$$\text{Torque at Peak HP} = \frac{HP \times 5252}{RPM}$$

5252 = Constant resulting from the conversion of torque and RPM into horsepower
HP = Maximum net horsepower (See Horsepower formula)
Peak HP = Maximum useful horsepower

GRADE ABILITY

$$GA = \frac{TE}{GVW} \text{ minus } .012$$

GA = Grade Ability
TE = Tractive Effort
GVW = Gross Vehicle Weight
.012 = 12 lb. per 1000 lb., rolling resistance on hard-surfaced roads

TRANSIT AND INTERCITY

FUEL SYSTEM			ELECTRICAL SYSTEM			Governor	TRANSMISSION				Uni- versals	REAR AXLE		BRAKES		SPRINGS				RUNNING GEAR													
Carburetor or Injector Pump	Make	Type	Tank Capacity (Gal.)	Ignition System— Generator and Starter—	Make		Battery	Type	Max. Governed Speed—M.P.H.	Clutch—Make and Size (In. diam.)		Make	No. of Forward Speeds	Low Speed Ratio— to 1	Type	Size of Series	Make and Model	Standard Gear Ratio—to 1	Type of Applicator	Total Lining Area (Sq. In.)	Drum Diam. (In.)	Operates on—	Total Lining Area (Sq. In.)	No. of Leaves	Length and Width (In.)	No. of Leaves	Length and Width (In.)	Front Axle—Make	Steering Gear—Make	Outside Diameter of Min. Turn Circle (Ft.)	Line Number		
Hol	Do	1 1/2	70	DR	+	12-158	Su	Var	LR	15	Fu	5	8.08	M	2	1600	Tim	L143P	5.29	A	768	16 1/2	De	65	11	50-4	17	60-4	Tim	Ro	70	1	
Hol	Do	1 1/2	70	DR	+	12-158	Su	Var	Lg	15 1/2	Fu	5	8.08	M	2	1700	Tim	Q143P	4.63	A	960	16 1/2	De	65	11	50-4	17	60-4	Tim	Ro	70	2	
Hol	Do	1 1/2	70	DR	+	12-158	Su	Var	LR	15	Fu	5	8.08	M	2	1600	Tim	L143P	5.29	A	768	16 1/2	De	65	11	50-4	17	60-4	Tim	Ro	78	3	
Hol	Do	1 1/2	70	DR	+	12-158	Su	Var	Lg	15 1/2	Fu	5	8.08	M	2	1700	Tim	Q143P	4.63	A	960	16 1/2	De	65	11	50-4	17	60-4	Tim	Ro	78	4	
Hol	Do	2	70	DR	+	12-158	Su	Var	Lg	15 1/2	Fu	5	7.33	M	2	1700	Tim	R143P	4.11	A	960	16 1/2	De	65	12	50-4	18	60-4	Tim	Ro	78	5	
Cum			70	AL		12-158	V	Var	Lg	17	Fu	5	7.33	M	2	1700	Tim	R143P	4.11	A	960	16 1/2	De	65	12	50-4	18	60-4	Tim	Ro	78	6	
Cum			70	LN		12-158	Ce	Var	Spl	14	F-S	5 1/2				1700	Tim	R 4.11		A	960	16 1/2	De	65	12	50-4	18	60-4	Tim	Ro	78	7	
Zen	Do	1 1/2	142	D	D	12-150	Ce	68	Lg	14	Cla	4	4.88	M	2	1600	Tim	L110 4.44	A	684	16 1/2	De	137						Tim	Ro	71	8	
Cum			142	D	D	12-150	Ce	68	Lg	14	Cla	4	4.88	M	2	1600	Tim	L110 4.44	A	684	16 1/2	De	137						Tim	Ro	71	9	
Zen	Do	1 1/2	142	D	D	12-150	Ce	68	LR	15	Cla	4	4.88	M	2	1600	Tim	L110 4.44	A	684	16 1/2	De	137						Tim	Ro	80	10	
Cum			142	D	D	12-150	Ce	68	LR	15	Cla	4	4.88	M	2	1600	Tim	L110 4.44	A	684	16 1/2	De	137						Tim	Ro	80	11	
Dup	Do	1 1/2	90	DR	DR	12-160	Ce	69	Lg	15 1/2	Cla	4	4.35	M	2	1600	Tim	H143P	4.62	A	610	16 1/2	De	45					Tim	Ro	76	12	
GM			90	DR	DR	12-160	Ce	68	Lg	15 1/2	Spl	5	5.08	M	2	1500	Tim	H143 4.62	A	610	16 1/2	De	45						Tim	Ro	76	13	
Cum			120	DR	DR	12-160	Cu	67	Spl	14	Spl	5	4.50	M	2	1600	Tim	L110 5.28	A	792	16 1/2	De	45						Tim	Ro	81	14	
Hol	Do		120	DR	DR	12-160	Ce	64	Spl	14	Spl	5	4.50	M	2	1600	Tim	L110 6.16	A	792	16 1/2	De	45						Tim	Ro	81	15	
Hol	Do		125	DR	LD	12-160	Ce	28*	None	Spl	12	5.43	H	2	1800	Tim	Q110 6.88	A	844	16 1/2	De	63	13	96-4	13	60-4	Tim	Ro	67 1/2	16			
Hol	Do			DR	LD	12-160	Ce	28*	None	Spl	12	5.43	H	2	1800	Tim	Q110 6.88	A	844	16 1/2	De	63	13	96-4	13	64-4	Tim	Ro	69 1/2	17			
Roa			125	LN	LD	12-160	Ce	23*	None	Spl	12	5.43	H	2	1800	Tim	R110 6.17	A	844	16 1/2	De	63	13	80-4	15	64-4	Tim	Ro	79 1/2	18			
Zen	Do	1 1/2	60	DR	DR	12-150	Ce	52		GM	4	3.82	GH	2	1400	Cla	130017 6.33	A	587	14 1/2	De	28	10	52-3	11	50-3	Cla	Sag	66	20			
Own			80	DR	DR	12-1754	Ce	46	Own	15	GM	4		H	2	1600	Tim	57620W 5.16	A	646	14 1/2	De	69						Tim	Sag	70	21	
Own			80	DR	DR	12-1754	Ce	48	Own	15	GM	4		H	2	1700	Tim	58600W 4.71	A	705	14 1/2	De	104						Tim	Sag	78	22	
Own			80	DR	DR	12-1754	Ce	57	Lg	17	Spl	4	4.36	M	2	1700	Tim	58820W 4.13	A	705	14 1/2	De	104						Tim	Sag	78	23	
Own			80	DR	DR	12-1754	Ce	48	Own	15	GM	4		H	2	1700	Tim	58720W 5.14	A	882	14 1/2	De	104						Tim	Sag	82	24	
Own			80	DR	DR	12-1754	Ce	45	Own	15	GM	4		H	2	1700	Tim	59720W 5.14	A	882	14 1/2	De	104						Tim	Sag	81	25	
Own			80	DR	DR	12-1754	Ce	58 1/2	Lg	17	Spl	4	4.36	M	2	1700	Tim	59610W 4.13	A	882	14 1/2	De	104						Tim	Sag	81	26	
Own			100	DR	DR	12-2054	Ce	58 1/2	Lg	17	Spl	4	3.86	M	2	1700	Tim	59600W 4.13	A	764	14 1/2	De	125 1/2						Tim	Ro	84	27	
Boa			80			12-200	Ce	21*	Spl	16	Spl	3		H	2	1700	Own	RAS402	Var	A	764	15	De	139					Own	Gem	67	28	
Boa			80			12-200	Ce	21*	Spl	16	Spl	3		H	2	1700	Own	RAS402	Var	A	764	15	De	139						Own	Gem	72	29
Boa			120	DR	DR	12-160	Ce	63	Lg	17	Own	4	4.66	M	2	1700	Own	RAS403 5.73	A	843	15	De	139						Own	Gem	74 1/2	30	
Cum			115		Op	12-160	Ce	41	Spl	18	Spl	3		H	2	1700	Tim	R110WX8 6.83	A	788	16 1/2	De	126	13	62-3 1/2	16	70-4	Tim	Ro	84 1/2	32		
Roa			115		Op	12-160	Ce	41	Spl	14	Spl	3		H	2	1600	Tim	L110P 6.16	A	622	16 1/2	De	101	11	62-3 1/2	12	70-4	Tim	Ro	71 1/2	33		
Hol	Do		115	Mal	Op	12-160	Su	41	Spl	14	Spl	3		H	2	1600	Tim	Q110P 6.83	A	685	16 1/2	De	101	12	62-3 1/2	14	70-4	Tim	Ro	80	34		
Cum			115		Op	12-160	Ce	41	Spl	16	Spl	3		H	2	1700	Tim	R110W 6.83	A	904	16 1/2	De	126						Tim	Ro	82 1/2	35	
Hol	Do		75	DR	LN	12-160	Su	50	BL	14	Spl	3	3.80	M	2	1500	Tim	L110 6.16	A	684	16 1/2	De	96	10	62-3 1/2	14	70-4	Tim	Ro	63	36		

DS—Drive shaft.
Dup—Duplex.
Fag—Fagel.
F-S—Fulmer or Spicer.
Fu—Fulmer Mfg. Co.
G—Gasoline.
Gem—Gemmer Mfg. Co.
GM—G. M. Hydramatic.
GM—General Motors Corp.

H—Hydraulic.
Hol—Holley Carburetor Co.
HS—Hall-Scott.
I—Valve in head.
IC—Inter-city service. IF—Infinite.
Int—International Harvester Co.
L—Valves in side.
LD—Leece-Neville (alternator); Delco-Remy (starter).

Lg—Long Mfg. Div.
LN—Leece-Neville Co.
LR—Lipe Rollway Corp.
Mal—Mallory. P—Parlor.
Op—Optional. R—Rear.
Ro—Ross Gear and Tool Co.
Roa—Roosa-Master.
Sag—Saginaw Steering Gear Div.
Spi—Spicer Mfg. Div.

Su—Suction.
Sub—Suburban service.
Tim—Timken Detroit Axle Co.
Tr—Transverse in rear.
UF—Under floor.
V—Vacuum. Var—Variable.
Wau—Waukesha Motor Co.
Whi—White Motor Co.
Zen—Zenith Carburetor Div.

MAXIMUM NET TORQUE

Max. Net Torque = $\frac{\text{Torque at Peak HP} \times 5}{4}$
(This is approximate and should be used only when actual net torque is not known.)
5 and 4 = Figures based on an analysis of a number of torque curves

FINAL GEAR RATIO

$$FGR = \frac{R \times GYW \times (GA + .012)}{\text{lb. in. Torque} \times .90}$$

GA = Grade Ability
GYW = Gross Vehicle Weight
lb. in. Torque = 12 × lb. ft. Torque
R = Rolling Radius in Inches
.90 = Efficiency for all rear axles except worm, then .85
.012 = Rolling resistance on hard-surfaced roads.

PISTON DISPLACEMENT

Piston Displacement in cu. in. = $B \times B \times .7854 \times S \times \text{No. of Cylinders}$
B = Bore
S = Stroke
.7854 = Constant comprising the conversion of the area of a square to the area of a circle of the same dimensions

TRACTIVE EFFORT

$$TE = \frac{\text{lb. in. Torque} \times FGR \times .90}{R}$$

R = Rolling Radius in Inches
FGR = Final Gear Ratio
lb. in. Torque = 12 Times Torque in lb. ft.
.90 = Efficiency for all rear axles except worm, then .85

MAX. NET ENGINE TORQUE

Torque in lb. ft. = $.80 \times \text{cu. in. Piston Displacement}$ (This is approximate and should be used only when actual torque is not known.)
.80 = Average figure based on analysis of a number of torque curves

VEHICLE SPEED

$$\text{MPH} = \frac{\text{RPM} \times R}{168 \times FGR}$$

MPH = Miles Per Hour
RPM = Engine Revolutions Per Minute
R = Rolling Radius in Inches
FGR = Final Gear Ratio
168 = A constant comprising the conversion of rolling radius in inches to wheel circumference in feet; wheel revolutions per minute to wheel revolutions per hour; feet per hour to miles per hour

New "Jimmy" Diesel *the thriftiest ever!*

New GM "71E" Diesel can cut gasoline engine operating costs in half—now available for any make truck 26,000 GVW and up

If you're using gasoline trucks for heavy hauling, almost any Diesel will cut your fuel costs—on the average about 3¢ a mile.

And this new free-breathing General Motors "71E" Diesel—with 4-valve head and new free-flow tip injector—is proving itself second to none on fuel mileage. But fuel savings are only part of the extra economy you get with a "Jimmy" Diesel. Consider these features also:

Longer Life—due to simplified, heavy-duty, 2-cycle design. Field experience shows that GM Diesels have longer and lower maintenance cost periods between overhauls than 4-cycle Diesels.

Easier Maintenance—because of their lighter-weight, parts-interchangeability features and the ready availability of unit subassemblies. Minor repairs or

major overhauls can be made on a "Jimmy" in much less time than on other Diesels.

Lower Parts Prices—due to standardization, interchangeability and ultramodern manufacturing techniques. Price of piston assembly for a competitive 4-cycle truck Diesel is 63% higher than for a "Jimmy" Diesel. And you make similar savings on other GM Diesel parts, too!

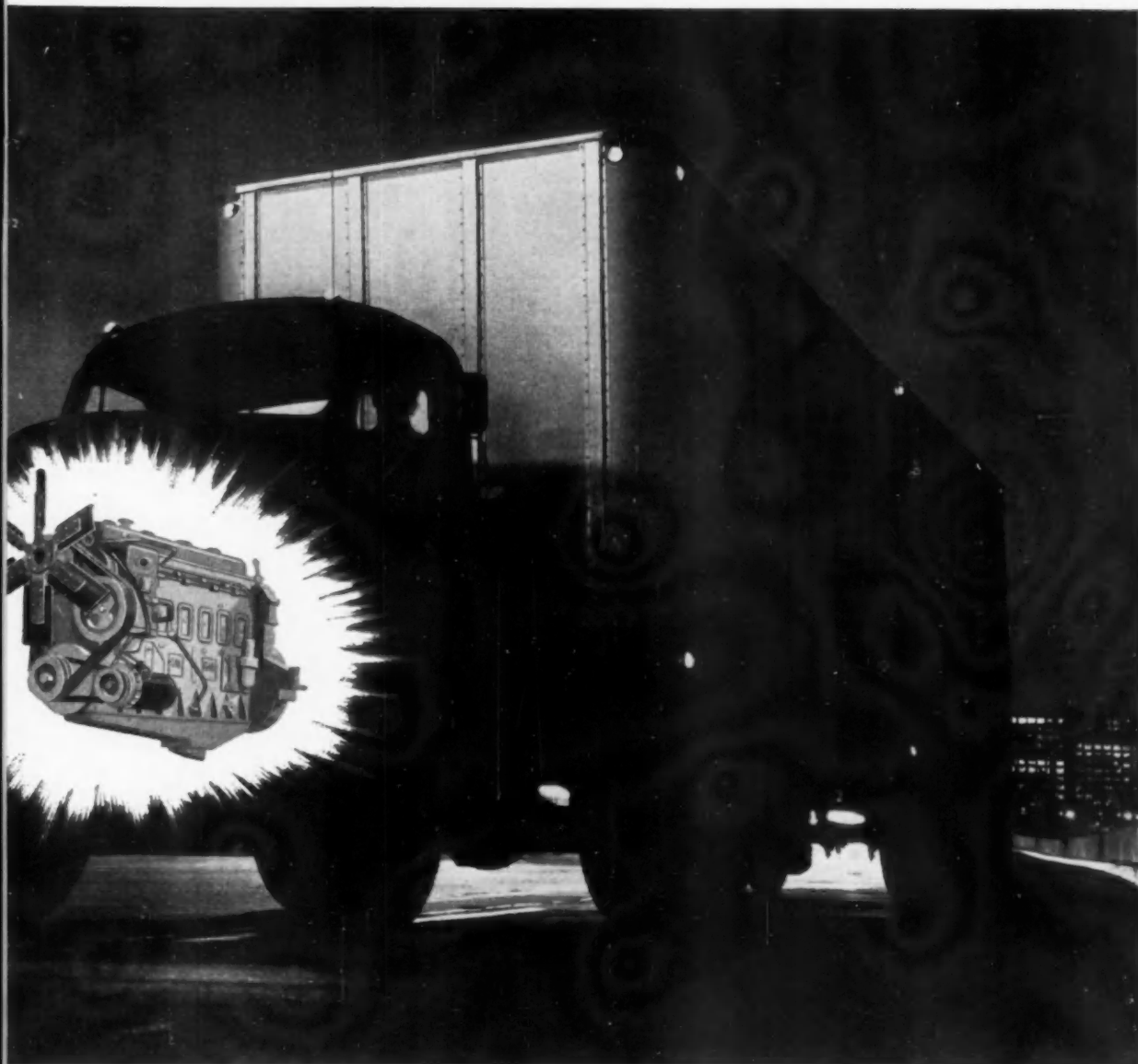
Faster Response—the greater load acceleration of a "Jimmy" Diesel comes from its trigger-quick 2-cycle response, higher power-to-weight ratio and greater torque reserve.

Whether the truck you are now using is gasoline or Diesel—a GM



Diesels
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"71E"

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Diesel truck engine is your best way to cut operating costs.

Call your GM Diesel distributor about repowering present equipment. And when you're in the market for new trucks, be sure to ask for this great new GM "71E" Diesel—it's the *thriftiest on wheels!*

Now — more than ever — it pays to standardize on GM Diesels—available in 1485 applications of power equipment built by more than 175 manufacturers. Parts and Service Worldwide.

Here's how a "Jimmy" Diesel fits your truck

Load	Model	Horsepower
35-45,000 GCW	4-71E	140 gross HP @ 2100 RPM
40-60,000 GCW	4-71T*	171 gross HP @ 2300 RPM
50-76,800 GCW	6-71E	210 gross HP @ 2100 RPM
60,000 GCW and up	6-71T*	236 gross HP @ 2100 RPM

*New GM Turbopower Diesels—higher power with little increase in size or weight.

Write for illustrated brochure,
"A New Line of GM Diesel Truck Engines"



DETROIT DIESEL

Engine Division of General Motors, Detroit 28, Michigan

In Canada: GENERAL MOTORS DIESEL LIMITED, London, Ontario

Regional Offices: New York, Atlanta, Detroit, Chicago, Dallas, San Francisco Single Engines . . . 30 to 300 H.P. Multiple Units . . . Up to 893 H.P. †

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ENGINE POWER RATINGS, DIESEL

For Gasoline Engines, See Page 236

ENGINE MAKE AND MODEL	Number of Cylinders Bore and Stroke (In.)	MAX. BRAKE H.P. at R.P.M.		TORQUE		Engine Weight Without Carburetor or Ignition (Lb.)
		With Bare Engine	With Standard Accessories ¹	Piston Displacement (Cu. In.)	Maximum Torque at R.P.M. (Lb. Ft.)	
ALLIS-CHALMERS						
6DA-273	6-3 1/2 x 4 1/2	74-2100	91-2000	273.0	14.20	204-1400
6DA-279	6-5 1/2 x 6	107-2100	122-1800	779.0	14.20	580-1400
6DA-544	6-5 1/2 x 6 1/2	215-2100	147-1800	944.0	14.20	640-1500
6DAS-844	6-5 1/2 x 6 1/2	230-2100	180-1800	944.0	12.00	780-1500
6DA-1125	6-5 1/2 x 6 1/2	285-2100	190-1800	1125.0	14.20	830-1300
6DAS-1125	6-5 1/2 x 6 1/2	350-2100	210-1800	1125.0	12.00	900-1400
CONTINENTAL						
TD-8427	6-4 1/2 x 5 1/2	116-2400		427.0	14.50	307-1200
RD-6572	6-4 1/2 x 5 1/2	172-2400		572.0	14.50	428-1300
SD-8802	6-5 1/2 x 6 1/2	225-2200		802.0	14.70	620-1300
VD-9603	6-4 1/2 x 6 1/2	182-2800		603.0	15.80	469-1300
CUMMINS						
J-6	6-4 1/2 x 5	100-1800	75-1800	401.0	15.70	305-1450
JF-6	6-4 1/2 x 5	110-2200	79-1800	401.0	15.70	305-1450
JN-6	6-4 1/2 x 5	130-2500	90-2200	401.0	15.80	295-1800
JS-6	6-4 1/2 x 5	160-2500	110-2200	401.0	13.00	375-1700
JNS-6	6-4 1/2 x 5	175-2500	122-2200	401.0	13.00	407-1750
JT-6	6-4 1/2 x 5	175-2500	121-2200	401.0	15.80	407-1750
HR-4	4-5 1/2 x 6	120-2100	85-1800	495.0	15.50	375-1200
HRC-4	4-5 1/2 x 6	115-1800	85-1800	495.0	15.50	375-1200
NHC-4	4-5 1/2 x 6	130-2000	93-1800	495.0	15.50	403-1200
NT-4	4-5 1/2 x 6	165-2000	117-1800	495.0	15.50	475-1400
H-6	6-4 1/2 x 6	160-1800	120-1800	672.0	16.60	512-1250
HF-6	6-4 1/2 x 6	180-2100		672.0	15.50	450-1500
HR-6	6-5 1/2 x 6	175-1800	130-1800	743.0	15.50	550-1300
HRR-6	6-5 1/2 x 6	190-2000	136-1800	743.0	15.50	590-1300
HS-6	6-4 1/2 x 6	210-1800	155-1800	672.0	14.00	673-1250
HRS-6	6-5 1/2 x 6	220-1800	160-1800	743.0	13.50	753-1300
NH-6	6-5 1/2 x 6	220-2100	150-1800	743.0	15.50	608-1600
NT-6	6-5 1/2 x 6	250-2100	170-1800	743.0	15.50	695-1500
NT-6	6-5 1/2 x 6	262-2100	172-1800	743.0	15.50	695-1500
NHS-6	6-5 1/2 x 6	290-2100	182-1800	743.0	13.50	775-1500
NHRS-6	6-5 1/2 x 6	320-2100	220-1800	743.0	12.00	985-1600
NRT-6	6-5 1/2 x 6	300-2100	201-1800	743.0	14.50	810-1550
NRT-6	6-5 1/2 x 6	335-2100	225-1800	743.0	14.50	900-1500
NHR-6	6-5 1/2 x 6	175-1800	130-1800	743.0	15.50	550-1300
NHRR-6	6-5 1/2 x 6	190-2000	136-1800	743.0	15.50	590-1300
NHM-6	6-5 1/2 x 6	210-2100	146-1800	743.0	15.50	550-1590
NHMT-6	6-5 1/2 x 6	250-2100	172-1800	743.0	15.50	695-1500
NHRS-6	6-5 1/2 x 6	320-2100	220-1800	743.0	12.00	985-1600
NHRT-6	6-5 1/2 x 6	300-2100	201-1800	743.0	14.50	808-1550
DEUTZ						
F3L-712	3-3 1/2 x 4 1/2	45-2800	30-2000	156.0	20.00	92-1800
F4L-712	4-3 1/2 x 4 1/2	60-2800	40-2000	207.0	20.00	123-1800
F6L-712	6-3 1/2 x 4 1/2	90-2800	60-2000	311.0	20.00	184-1800
FA6L-514	4-4 1/2 x 5 1/2	90-2300	56-1800	325.0	17.80	215-1200
FA6L-514	6-4 1/2 x 5 1/2	132-2300	84-1800	487.0	17.80	310-1200
FA6L-514	8-4 1/2 x 5 1/2	180-2300	112-1800	649.0	17.80	415-1200
FAT2L-614	12-4 1/2 x 5 1/2	265-2300	170-1800	974.0	17.80	625-1200
BFATL-514	6-4 1/2 x 5 1/2	157-2300	105-1800	487.0	15.40	361-1500
BFATL-514	8-4 1/2 x 5 1/2	210-2300	140-1800	649.0	15.40	483-1500
BF2L-614	12-4 1/2 x 5 1/2	300-2300	210-1800	974.0	15.40	751-1500
GENERAL MOTORS						
4-51	4-4 1/2 x 4 1/2			217.0	18.00	1035
4-71	4-4 1/2 x 5			284.0	17.00	1570
4-71-T	4-4 1/2 x 5			294.0	17.00	1760
6-71	6-4 1/2 x 5			428.0	17.00	1875
6-71-T	6-4 1/2 x 5			428.0	17.00	2165
6-110	6-5 1/2 x 5			660.0	18.00	3260
4-71-E	4-4 1/2 x 5			284.0	17.00	1550
6-71-E	6-4 1/2 x 5			428.0	17.00	2010
6-110	6-5 1/2 x 5			660.0	18.00	3260
HERCULES						
D1X4D	4-3 1/2 x 4	57-3000	41-2200	165.0	15.50	120-1500
D1X6D	6-3 1/2 x 4	93-3000	67-2200	249.0	15.50	186-1800
DOOD	4-4 1/2 x 4 1/2	70-2600	53-1800	255.0	15.50	182-1400
D1X6-272	6-3 1/2 x 4	102.5-3000	72-2200	272.0	15.50	204-1800
DJXC	6-3 1/2 x 4 1/2	83-2600	59-1800	298.0	15.50	208-1300
DJXH, DJXHF	6-3 1/2 x 4 1/2	99-2600	67-1800	298.0	15.50	234-1400
DW4D	6-4 1/2 x 5	138-2600	91-1800	404.0	15.50	320-1600
DW4LD	6-4 1/2 x 5	142-2600	95-1800	426.0	15.50	333-1600
DW4LDF	6-4 1/2 x 5	142-2600	90-1800	426.0	15.50	319-1400
DRXB	6-4 1/2 x 5 1/2	134-2200	90-1600	474.0	15.00	358-1200
TCD-501	6-4 1/2 x 5 1/2	180-2000	122-1600	501.0	15.00	480-1800
DRXC	6-4 1/2 x 5 1/2	147-2200	100-1600	529.0	15.00	400-1100
DFXD	6-5 1/2 x 6	217-2100	162-1600	855.0	14.80	485-1200
DFXB	6-5 1/2 x 6	228-2100	170-1600	895.0	14.80	580-1200
TCD-895	6-5 1/2 x 6	318-2000	218-1600	895.0	14.80	846-1800
DFXH, DFXHF	6-5 1/2 x 6	280-2100	187-1600	935.0	14.80	750-1200
DNXV8D	8-6 1/2 x 6	388-1800	280-1600	1468.0	14.80	1100-1200
MACK						
END-673	6-4 1/2 x 6	170-2100		672.0	16.59	480-1200
ENDT-673	6-4 1/2 x 6	205-2100		672.0	16.59	580-1400
MERCEDES BENZ						
DM-636	4-2 1/2 x 3 1/2	46-3500	31.2-3000	106.0	19.00	70-1800
OM-312	6-3 1/2 x 4 1/2	110-2800	68-2400	280.0	19.50	188-1500
OM-321	6-3 1/2 x 4 1/2	120-3000	83.5-2600	312.0	19.50	217-1500
OM-315	6-4 1/2 x 5 1/2	155-2100	110.5-1800	505.0	18.50	395-1200
OM-328	6-4 1/2 x 5 1/2	200-2800	138-1800	660.0	19.50	468-1200
MB-837-A	6-5 1/2 x 6 1/2	480-2200	380-1800	1823.0		1206-1600
MB-837-Aa	8-6 1/2 x 6 1/2	600-2200	488-1800	1823.0		2100
P. & H.						
287C-18A	2-4 1/2 x 5 1/2	95-1800	66-1800	174.0	16.00	270-1200
387C-18A	3-4 1/2 x 5 1/2	144-1800	103-1800	261.0	16.00	425-1300
487C-18A	4-4 1/2 x 5 1/2	200-1800	144-1800	348.0	16.00	600-1350
687C-18A	6-4 1/2 x 5 1/2	280-1800	205-1800	522.0	16.00	825-1300
WAUKESHA						
180-DLC	4-3 1/2 x 3 1/2	45-2400	31-2000	144.0	17.00	102-1800
185-DLC	4-3 1/2 x 3 1/2	60-2400	44-2000	216.0	17.00	152-1000
190-DLCA	6-3 1/2 x 4	84-2800	55-2000	265.0	17.00	191-1400
135-DKB	6-4 1/2 x 5	98-2800	70-2000	302.0	17.00	221-1800
135-DKBS	6-4 1/2 x 5	147-2800	99-2000	426.0	17.50	328-1600
135-DKBSA	6-4 1/2 x 5	185-2800	121-2000	426.0	17.50	400-1800
148-DKB	6-5 1/2 x 6	200-2100	147-1800	779.0	17.50	584-1000
148-DKBSA	6-5 1/2 x 6	280-2100	194-1800	1179.0	17.50	706-1800
WAKDB	6-6 1/2 x 6 1/2	258-1800	195-1600	1197.0	16.50	840-1000
WAKDBS	6-6 1/2 x 6 1/2	352-1800	258-1600	1197.0	16.50	1062-1600
197-DLC	6-4 x 4	81-2800	65-2000	302.0	18.50	216-1600
197-DLCS	6-4 x 4	131-2800	84-2000	302.0	18.50	275-1800

ABBREVIATIONS

¹—For Diesel engines this is continuous sustained horsepower.

²—Weight includes carburetor and ignition.
³—Liquid petroleum gas engine.
⁴—Industrial power ratings.

⁵—High output engine.
⁶—Air cooled engines.
⁷—Without fan or muffler.
⁸—Supercharged engine.

BE—Bare engine.
 EA—Engine with standard accessories.

In thousands of units except bus sales are in actual numbers	Truck and Bus Tires			
	New Truck Registrations	Truck Factory Sales—Domestic	Truck Trailer Shipments	Bus Factory Sales—Domestic
1957	886.1	891.4	59.7	3310
1956	894.4	895.2	67.5	3617
1955	957.0	1052.7	76.3	3599
1954	829.1	843.5	54.6	3782
1953	930.3	1063.6	66.7	3731

YOU CAN CUT COSTS 25% ON MUFFLER REPLACEMENT WITH THE MIDAS® FLEET PLAN



Here's How midas® Muffler Shops Help You!

1. YOU PAY LESS FOR THE MUFFLERS

The Midas Fleet Plan is a wholesale plan based on your purchasing power.

2. YOU SAVE LABOR COSTS

The Midas Fleet Plan provides for free installation on all vehicles.

3. YOU SAVE TIME

Installations made in 15 minutes... no layups.

4. YOU DO AWAY WITH INVENTORY

Your nearby Midas Muffler Shop has mufflers and pipes for every car or truck.*

**YOUR CARS AND TRUCKS CAN BE SERVICED AT ANY OF THESE HUNDREDS
OF MIDAS MUFFLER SHOPS FROM COAST-TO-COAST.**

BIRMINGHAM, ALA. 530 South 22nd Street
DOTHAN, ALA. 105 North Oates Street
GADSDEN, ALA. 671 Meghan Boulevard
MOBILE, ALABAMA, 1905 St. Stephens Road
MOBILE, ALABAMA, 1200 Michigan Boulevard
MONTGOMERY, ALABAMA, 9 Molton Street
TUSCALOOSA, ALABAMA, 622-25th Avenue
LITTLE ROCK, ARKANSAS, 4315 W. 29th St.
PALO ALTO, CALIFORNIA, 3839 El Camino Real
SAN JOSE, CALIFORNIA, 1785 East Santa Clara
SANTA CLARA, CALIFORNIA, Park and Bellomy
DENVER, COLORADO, 3300 West Colfax
BRIDGEPORT, CONN. 2050 Fairfield Avenue
EAST HARTFORD, CONN. 713 Connecticut Blvd.
NEW HAVEN, CONNECTICUT, 95 Whalley Ave
WASHINGTON D. C. Area
3646 Bladensburg Road, Cottage City, Md.
2852 University Blvd., West, Wheelon, Md.
2115 Wilson Blvd., Arlington, Va.
CLEARWATER, FLORIDA, 950 Cleveland Street
FORT LAUDERDALE, FLORIDA, 2212 S. Andrews
FORT MYERS, FLORIDA, 1533 Jackson Street
JACKSONVILLE, FLORIDA, 3401 North Main St.
JACKSONVILLE, FLORIDA, 6231 Beach Road
MIAMI, FLORIDA, 499 N. W. 79th Street
MIAMI, FLORIDA, 1670 S. W. 27th Avenue
OCALA, FLORIDA, 1519 Jacksonville Highway
ORLANDO, FLORIDA, 1220 West Robinson
PANAMA CITY, FLORIDA, 535 Mercer Avenue
PENSACOLA, FLORIDA, 1800 West Cervantes
POMPAHO BEACH, FLA., 1484 S. Federal Hwy
ST. PETERSBURG, FLA. 9th St. & 6th Ave. N.
TAMPA, FLORIDA, 2003 Grand Central Avenue
WEST PALM BEACH, FLA., 2733 South Dixie Hwy
ALBANY, GEORGIA, 148 East Broad Street
ATLANTA, GEORGIA, 877 Marietta Street, N. W.
ATLANTA, GEORGIA, 292 Memorial Drive, S. E.
ATLANTA, GEORGIA, 548 Ponce de Leon Ave., N. E.
AUGUSTA, GEORGIA, 705 Reynolds Street
COLUMBUS, GEORGIA, 315-13th Street
MACON, GEORGIA, 656 Broadway
SAVANNAH, GEORGIA, Montgomery & Duffy Sts.
CHICAGO, ILLINOIS, 4417 South Kedzie Avenue
CHICAGO, ILLINOIS, 6050 Broadway

CHICAGO, ILLINOIS, 27 East 111th Street
CHICAGO, ILLINOIS, 2710 North Sawyer Avenue
CHICAGO, ILLINOIS, 15 North Laramie
DECATUR, ILLINOIS, 243 West Cero Gordo
EAST ST. LOUIS, ILLINOIS, 5335 State Street
ELGIN, ILLINOIS, 250 South Grove
PEORIA, ILLINOIS, 405 South Jefferson Street
WAUKEGAN, ILLINOIS, 1535 Bellevue Street
FORT WAYNE, INDIANA, 319 W. Baker Street
GARY, INDIANA, 236 West Ridge Road
HAMMOND, INDIANA, 6031 Calumet Avenue
INDIANAPOLIS, INDIANA, 322 E. Market Street
INDIANAPOLIS, INDIANA, 1201 W. 16th Street
DAVENPORT, IOWA, 117 West Fourth Street
DES MOINES, IOWA, 1114 Walnut Street
DES MOINES, IOWA, 628 East Locust Street
KANSAS CITY, KANSAS, 612 Kansas Avenue
TOPEKA, KANSAS, 400 East Sixth Street
WICHITA, KANSAS, 2307 East Central
LOUISVILLE, KENTUCKY, 1113 S. Sixth Street
LOUISVILLE, KENTUCKY, 415 E. St. Catherine St.
ALEXANDRIA, LOUISIANA, 317 First Street
BATON ROUGE, LOUISIANA, 4085 Florida Street
BATON ROUGE, LOUISIANA, 3232 Plank Road
LAFAYETTE, LOUISIANA, 359 South Buchanan
LAKE CHARLES, LOUISIANA, 2521 Ryan Street
MARRERO, LOUISIANA, 4801 Fourth Street
METAIRIE, LOUISIANA, 3729 Airline Highway
MONROE, LOUISIANA, 304 Walnut Street
NEW ORLEANS, LOUISIANA, 2530 Canal Street
NEW ORLEANS, LOUISIANA, 844 Howard Street
NEW ORLEANS, LOUISIANA, 1700 Tulane Ave.
NEW ORLEANS, LOUISIANA, 401 South Claiborne
SHREVEPORT, LOUISIANA, 1024 Texas
LEWISTON, MAINE, 68 Middle Street
BALTIMORE, MARYLAND, 5617 Harford Road
BALTIMORE, MARYLAND, 645 East 25th Street
HOLYOKE, MASSACHUSETTS, 664 Main Street
LOWELL, MASSACHUSETTS, 555 Gorham Street
MALDEN, MASSACHUSETTS, 190 Exchange St.
MEDFORD, MASSACHUSETTS, 407 Mystic Ave.
PITTSFIELD, MASS., 501 Wabash Street
WEST SPRINGFIELD, MASS., 518 Memorial Ave.
WORCESTER, MASS., 1143 Main Street
FLINT, MICHIGAN, 3009 South Saginaw
GRAND RAPIDS, MICH., 728 Division Avenue S.
JACKSON, MICHIGAN, 207 Pearl Street
KALAMAZOO, MICHIGAN, 346 East South Street
LANSING, MICHIGAN, 120 West Jackson
MUSKEGON, MICHIGAN, 2107 Henry Street
PORTIAC, MICHIGAN, 256 South Saginaw
SAGINAW, MICHIGAN, 208 North Jefferson
MINNEAPOLIS, MINN., 1400 Hennepin Avenue
MINNEAPOLIS, MINN., 4109 Lake Street
BILOXI, MISSISSIPPI, 931 Calhoun Street
JACKSON, MISSISSIPPI, 1305 South Gallatin

KANSAS CITY, MISSOURI, 1905 Truman Road
KANSAS CITY, MISSOURI, 3020 Van Brunt
ST. LOUIS, MISSOURI, 1163 South Kingshighway
ST. LOUIS, MISSOURI, 6336 South Grand Ave.
SPRINGFIELD, MISSOURI, 524-26 Boonville
OMAHA, NEBRASKA, 1501 Davenport Street
MANCHESTER, N. H., 50 West Bridge Street
CLIFTON, NEW JERSEY, 1340 Main Avenue
JERSEY CITY, N. J., 771 Communipaw Avenue
NEWARK, NEW JERSEY, 975 Raymond Blvd.
ALBUQUERQUE, N. M., 8425 Central N. E.
ALBANY, NEW YORK, 1722 Central Avenue
BINGHAMTON, N. Y., 48 State Street
BUFFALO, NEW YORK, 3425 Delaware Avenue
BUFFALO, NEW YORK, 1450 Michigan Avenue
BUFFALO, NEW YORK, 1597 Main Street
ELMIRA, NEW YORK, 261 Baldwin Street
HUNTINGTON STATION, LONG ISLAND, N. Y.,
643 East Jericho Turnpike
JAMESTOWN, NEW YORK, 1802 Washington St.
LATHAM, NEW YORK, Albany-Saratoga Road
MINEOLA, L. I., N. Y., 105 Jericho Turnpike
NIAGARA FALLS, NEW YORK, 501 Main Street
ROCHESTER, NEW YORK, 955 St. Paul Street
ROCHESTER, NEW YORK, 399 Broad Street
ROME, NEW YORK, 135 Erie Boulevard West
SYRACUSE, NEW YORK, 1205 Erie Blvd. East
SYRACUSE, NEW YORK, 515 South State
UTICA, NEW YORK, 1205 Grisham Street West
CHARLOTTE, N. C., 916 North Graham Street
DURHAM, NORTH CAROLINA, 310 Foster Street
FAYETTEVILLE, N. C., 332 Franklin Street
GREENSBORO, N. C., 224 Commerce Place
HIGH POINT, N. C., 213 English Street
DALEIGH, NORTH CAROLINA, 113 Davis Street
WINSTON-SALEM, N. C., 711 N. Trade Street
AKRON, OHIO, 111 South Case Avenue
AKRON, OHIO, 290 West Exchange
CANTON, OHIO, Corner Cleveland Avenue and
27th Street, N. W.
CINCINNATI, OHIO, 3062 Markbreit Avenue
CINCINNATI, OHIO, 3718 Spring Grove Avenue
CINCINNATI, OHIO, 3600 Reading Road
CLEVELAND, OHIO, 11905 Miles Avenue
CUYAHOGA FALLS, OHIO, State Road and Byrd
DAYTON, OHIO, 708 West Third Street
LORAIN, OHIO, 1850 Elvira
MANSFIELD, OHIO, 28 East Sixth Street
SPRINGFIELD, OHIO, 325 West High Street
CINCINNATI, OHIO, 1120 Adams Street
TOLEDO, OHIO, 3419 Collingswood
WARREN, OHIO, 705 West Market Street
YOUNGSTOWN, OHIO, 225 Belmont Avenue
OKLAHOMA CITY, OKLAHOMA, 315 N. Walker
TULSA, OKLAHOMA, 4217 N. Western
TULSA, OKLAHOMA, 3811 East 11th Street

TULSA, OKLAHOMA, 4722 South Peoria
ALLEN TOWN, PA., Front and Union Streets
ALTOONA, PA., 717 Chestnut Avenue
ERIE, PA., 202 East Eighth Street
HARRISBURG, PA., 1497 Paxton Street
JOHNSTOWN, PA., 919 Franklin Street
MCKEESPORT, PA., Cor. 12th and Walnut Sts.
NEW KENSINGTON, PENNSYLVANIA,
400-402 Freeport Street
PHILADELPHIA, PA., 5023 N. Broad Street
PHILADELPHIA, PA., 47nd & Walnut
PITTSBURGH, PA., 3109 W. Liberty Avenue
YORK, PA., 230 West Philadelphia Street
PROVIDENCE, RHODE ISLAND, 555 North Main
ANDERSON, S. C., 306 1/2 N. Main Street
CHARLESTON, S. C., 2039 Meeting Street Road
CHARLESTON, S. C., 105 Market Street
COLUMBIA, S. C., 1100 Devine Street
GREENVILLE, S. C., 700 Buncombe Street
SPARTANBURG, S. C., 207 Magnolia Street
CHATTANOOGA, TENN., 2309 McCallie Avenue
NASHVILLE, TENNESSEE, 2019 North Central
MEMPHIS, TENNESSEE, 630 Madison Avenue
MEMPHIS, TENNESSEE, 2555 Summer Avenue
NASHVILLE, TENN., 121-123rd Avenue North
ADILENE, TEXAS, 926 North Walnut
AMARILLO, TEXAS, 728 North Fillmore Street
AUSTIN, TEXAS, 207 West Riverside Drive
DALLAS, TEXAS, 4230 Ross Ave. at Peak St.
DALLAS, TEXAS, 2815 Main Street
EL PASO, TEXAS, 1015 Teas Street
FT. WORTH, TEXAS, 2513 White Settlement Rd.
FT. WORTH, TEXAS, 201 Commerce Street
HOUSTON, TEXAS, Corner Polk at Caroline
LONGVIEW, TEXAS, 322 East Tyler Street
LUBBOCK, TEXAS, 2776 Texas Avenue
PORT ARTHUR, TEXAS, 3310-25th Street
SAN ANTONIO, TEXAS, 1227 N. Main Avenue
SAN ANTONIO, TEXAS, 3930 E. Commerce St.
WACO, TEXAS, 817 Franklin Street
WICHITA FALLS, TEXAS, 12th & Indiana
ODGEN, UTAH, 2754 Second Avenue
SALT LAKE CITY, UTAH, 960 South State Street
NORFOLK, VIRGINIA, 7471 Tidewater Drive
NORFOLK, VIRGINIA, 108 West 15th
PORTSMOUTH, VIRGINIA, 1414 High Street
RICHMOND, VIRGINIA, 401 West Broad Street
ROANOKE, VIRGINIA, 426 Carter Avenue N. E.
MADISON, WISCONSIN, 9 N. Ingersoll Street
CHARLESTON, W. VA., 1810 S. Tacoma Way
HUNTINGTON, W. VA., 424 Fourth Avenue
MILWAUKEE, WISCONSIN, 9 N. Ingersoll Street
MILWAUKEE, WIS., 1767 South Muskego
MILWAUKEE, WIS., 4522 West Lisbon Avenue
MILWAUKEE, WIS., 8745 West National Avenue
CANADA: TORONTO, ONT., 1580 Kingston Rd.



For complete information on this time and money saving Midas Muffler Fleet Plan, write—

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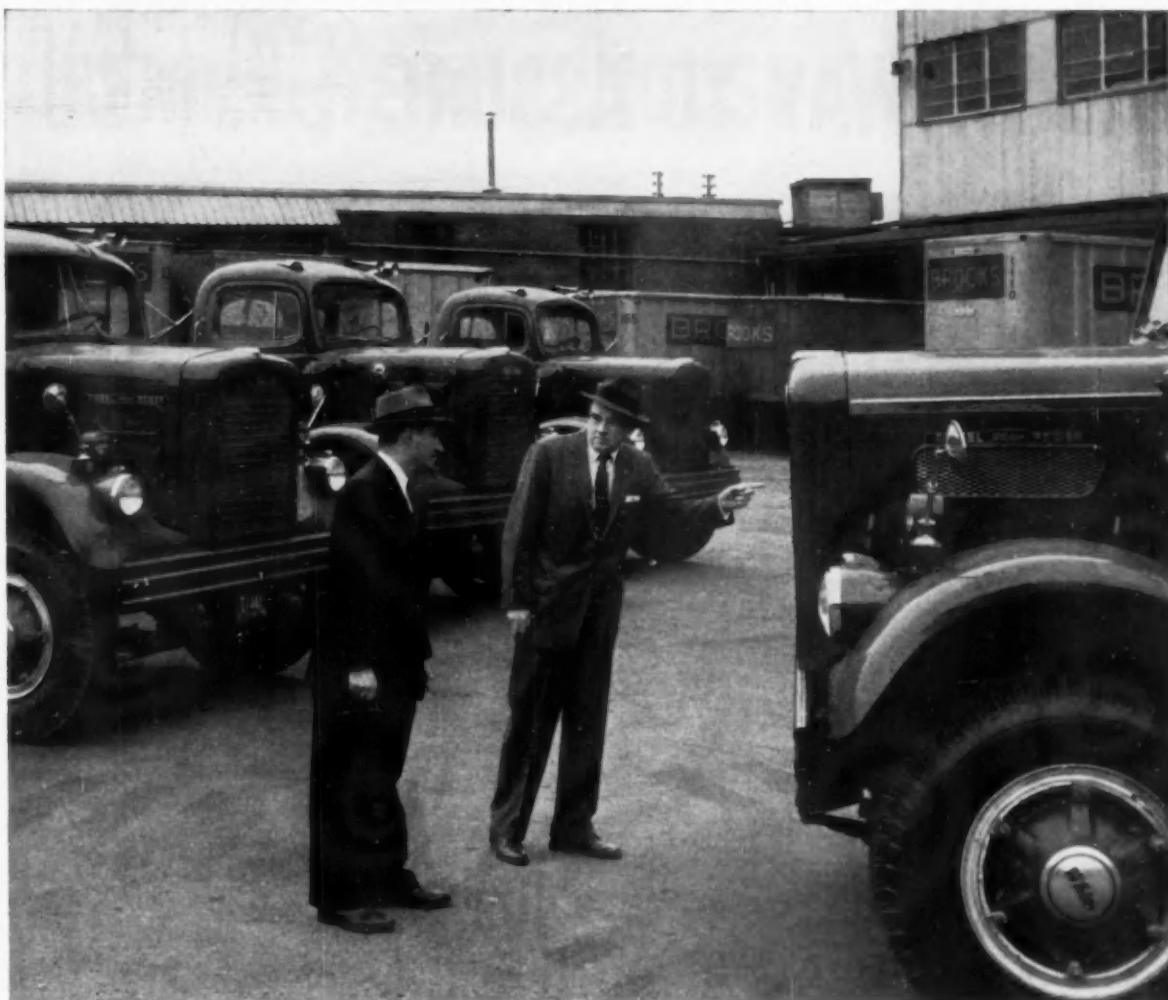
*In addition we can design mufflers for any fleet vehicle on the road.

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ENGINE POWER RATINGS, GASOLINE

For Footnotes, See Page 234

ENGINE MAKE AND MODEL	Number of Cylinders and Stroke (In.)	MAX. BRAKE H.P. at R.P.M.		Piston Displacement (Cu. In.)	Compression Ratio	TORQUE		Engine Weight Without Carburetor or Ignition (Lb.)
		With Bare Engine	With Standard Accessories ¹			Maximum Torque at R.P.M. (Lb. Ft.)	Engine Weight Without Carburetor or Ignition (Lb.)	
ALLIS-CHALMERS								
LO-525	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	139-2400	114-1800	525.0	5.00	384-1200 (BE)	1195	
6-MO-983	6-5 $\frac{1}{2}$ x6	200-2000	173-1800	683.0	5.50	670-1000 (BE)	2400	
6-MO-979	6-5 $\frac{1}{2}$ x6 $\frac{1}{2}$	210-1950	186-1800	970.0	5.43	750-800 (BE)	2400	
BRENNAN								
75	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	90-3500	75-3300	230.3	6.70	175-1000 (EA)	710	
B-70	6-4x5 $\frac{1}{2}$	90-2000	75-2000	415.0	4.50	278-900 (EA)	800	
B-100	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	94-2000	80-2000	496.0	4.50	350-1200 (EA)	875	
CHEVROLET								
Thriftmaster	6-3 $\frac{1}{2}$ x3 $\frac{1}{2}$	145-4200	125-4000	235.5	8.25	215-2000 (BE)	552	
Thriftmaster Spl.	6-3 $\frac{1}{2}$ x3 $\frac{1}{2}$	145-4200	120-3800	235.5	8.25	215-2000 (BE)	554	
Jobmaster	6-3 $\frac{1}{2}$ x3 $\frac{1}{2}$	180-4000	137-4000	261.0	8.00	235-2000 (BE)	556	
Tradmester	6-3 $\frac{1}{2}$ x3	180-4200	137-4000	263.0	8.50	270-2000 (BE)	528	
Taskmaster	6-3 $\frac{1}{2}$ x3	180-4200	137-4000	263.0	8.00	270-2000 (BE)	524	
Leadmaster	6-4x3 $\frac{1}{2}$	195-4000	170-4000	322.0	7.70	310-2200 (BE)	693	
Sup. Taskmaster	6-3 $\frac{1}{2}$ x3	175-4400	160-4000	263.0	8.00	275-2400 (BE)	524	
Workmaster	6-4 $\frac{1}{2}$ x3 $\frac{1}{2}$	230-4400	194-3800	348.0	8.00	335-2900 (BE)	791	
CONTINENTAL								
Y-4081	4-2 $\frac{1}{2}$ x3 $\frac{1}{2}$	36-3400		91.0		70-1500 (BE)	290	
F-4124	4-3x4 $\frac{1}{2}$	47-3200		124.0		94-1500 (BE)	395	
F-4140	4-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	52-3200		140.0		108-1600 (BE)	395	
F-4182	4-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	56-3200		162.0		122-1500 (BE)	395	
F-4186	6-3x4 $\frac{1}{2}$	77-3500		196.0	6.70	142-1600 (BE)	515	
F-6208	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	90-3500		209.0	6.70	180-1500 (BE)	515	
F-6226	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	98-3500		226.0	6.70	180-1500 (BE)	515	
M-6271	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	97-3000		271.0	6.70	209-1400 (BE)	755	
M-6290	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	108-3000		290.0	6.70	225-1400 (BE)	755	
N-6330	6-4x4 $\frac{1}{2}$	125-3000		330.0	6.70	258-1400 (BE)	755	
B-6371	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	123.5-3000		371.0	6.50	258-1200 (BE)	870	
T-6371	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	144-3000		371.0	6.40	297-1400 (BE)	1070	
B-6427	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	142-3000		427.0	6.50	327-1200 (BE)	875	
T-6427	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	170-3000		427.0	6.40	350-1300 (BE)	1075	
U-6501	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	178-2800		501.0	6.20	414-1200 (BE)	1825	
R-6513	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	192-2800		513.0	6.00	410-1200 (BE)	1825	
R-6572	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	250-2800		572.0	6.00	464-1200 (BE)	1825	
R-6602	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	232-2800		602.0	6.00	482-1200 (BE)	1825	
S-6748	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	250-2800		748.0	6.00	574-1200 (BE)	1865	
K-6271	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	115-3200		271.0	6.40	218-1400 (BE)	755	
K-6290	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	123-3200		290.0	6.40	232-1400 (BE)	755	
K-6330	6-4x4 $\frac{1}{2}$	147-3200		330.0	6.40	274-2000 (BE)	870	
S-6820	6-5 $\frac{1}{2}$ x5 $\frac{1}{2}$	275-2800		820.0	6.00	629-1300 (BE)	1796	
V-6803	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	240-3200		603.0	7.00	504-1400 (BE)	840	
N-6363	6-4x4 $\frac{1}{2}$	146-3000		363.0	6.50	304-1800 (BE)	860	
K-6363	6-4x4 $\frac{1}{2}$	162-3200		363.0	6.50	309-1800 (BE)	860	
DODGE								
W-300-M	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	113-3600	102-3600	230.2	7.90	196-1600		
D-100, D-200, D-300, P-300, P-400, W-100, W-200	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	120-3600	109-3600	230.2	7.90	202-1600		
D-400, S-400, D-500, S-500, W-300	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	125-3600	115-3600	250.6	7.10	216-1600		
D-600, S-600, W-500	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	130-3600	120-3600	265.4	7.10	226-1600		
D-100, D-200, D-300, P-300, P-400, W-100, W-200, D-400, S-400, D-500, C-500, S-500, W-300, W-500	6-3 $\frac{1}{2}$ x3 $\frac{1}{2}$	204-4400	165-4400	314.6	8.10	290-2400		
D-600, C-600, S-600	6-3 $\frac{1}{2}$ x3 $\frac{1}{2}$	207-4400	167-4400	314.6	7.60	295-2400		
D-700, C-700, S-700, T-700	6-3 $\frac{1}{2}$ x3 $\frac{1}{2}$	219-3900	190-3900	354.1	7.50	319-2400		
D-800, T-800	6-3 $\frac{1}{2}$ x3 $\frac{1}{2}$	224-3900	200-3900	354.1	7.50	340-2000		
D-900, T-900	6-3 $\frac{1}{2}$ x3 $\frac{1}{2}$	234-3900	211-3900	354.1	7.50	360-2400		
FORD								
EBR, EBS, EBT	6-3 $\frac{1}{2}$ x3 $\frac{1}{2}$	139-4200	126-4000	223.0	8.30	207-2250 (BE)	418	
ECT	6-3 $\frac{1}{2}$ x3 $\frac{1}{2}$	196-3800	172-3600	302.0	7.60	299-2500 (BE)	641	
ECS	6-3 $\frac{1}{2}$ x3 $\frac{1}{2}$	212-3800	187-3600	332.0	7.60	326-2500 (BE)	648	
EEH, EEJ	6-3 $\frac{1}{2}$ x3 $\frac{1}{2}$	186-4000	158-4000	292.0	7.90	269-2700 (BE)	553	
EEL	6-3 $\frac{1}{2}$ x3 $\frac{1}{2}$	187-3800	160-3600	292.0	7.60	270-2900 (BE)	553	
EDL	6-4 $\frac{1}{2}$ x3 $\frac{1}{2}$	226-3800	190-3600	401.0	7.50	350-2300 (BE)	963	
EDM	6-4 $\frac{1}{2}$ x3 $\frac{1}{2}$	260-3600	224-3400	477.0	7.50	430-2300 (BE)	927	
EDN	6-4 $\frac{1}{2}$ x3 $\frac{1}{2}$	277-3400	246-3200	534.0	7.50	490-2300 (BE)	941	
G. M. C.								
270	6-3 $\frac{1}{2}$ x4	130-3600	121-3400	289.5	7.75	238-1650 (BE)		
270	6-3 $\frac{1}{2}$ x4	140-3600	127-3400	289.5	7.75	246-1800 (BE)		
302	6-4x4	180-3800	141-3400	301.6	7.50	266-1800 (BE)		
336	6-3 $\frac{1}{2}$ x3 $\frac{1}{2}$	200-4400	171-3600	336.1	7.50	307-2200 (BE)		
370	6-4x3 $\frac{1}{2}$	232-4200	199-3600	370.7	7.65	355-2800 (BE)		
503	6-4 $\frac{1}{2}$ x3 $\frac{1}{2}$	217-3000	189-2800	662.7	8.00	455-1600 (BE)		
HALL-SCOTT								
890-QV-3, 890-QV-4	6-5x5	232-2800	205-2800	590.0	6.60	510-1800 (BE)	1130 ²	
890-BV-1 ³	6-5x5	246-2800	205-2800	590.0	6.60	510-1800 (BE)	1130 ²	
890-QH-1	6-5x5	246-2800	205-2800	590.0	6.60	510-1800 (BE)	1210	
890-BH-1 ³	6-5x5	246-2800	205-2800	590.0	6.60	510-1800 (BE)	1210	
6150-Q-1	6-5 $\frac{1}{2}$ x6	312-2400	284-2400	935.0	6.40	830-1300 (BE)	2150	
HALL-SCOTT—Cont'd								
6156-B-1	6-5 $\frac{1}{2}$ x6	338-2400	320-2400	935.0	6.10	870-1300 (BE)	2150	
6182-G-1	6-5 $\frac{1}{2}$ x7	332-2200	317-2200	1091.0	6.10	960-1250 (BE)	2150	
6182-B-1	6-5 $\frac{1}{2}$ x7	356-2200	341-2200	1091.0	6.10	1085-1100 (BE)	2150	
779	6-5 $\frac{1}{2}$ x8	252-2400		779.0	6.00	618-1600 (BE)	1786	
HERCULES								
ZXB	4-2 $\frac{1}{2}$ x3	25-4000	21-4000	65.0	6.30	40-2200 (BE)	179	
IXA	4-3x4	40-3200	34-3200	113.0	6.50	78-1800 (BE)	285	
IXB	4-3 $\frac{1}{2}$ x4	46-3200	39-3200	133.0	6.50	82-1800 (BE)	293	
IXLB	4-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	49-3200	42-3200	141.0	6.50	87-1800 (BE)	293	
JX40	6-2800	80-2800	61-2800	188.0	6.70	139-1400 (BE)	470	
QXC	4-4x4 $\frac{1}{2}$	68-2800	57-2800	214.0	6.70	137-1400 (BE)	470	
QXD	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	77.5-3200	66-3200	221.0	6.50	159-1400 (BE)	440	
QXLD	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	78.4-3200	70-3200	230.0	6.50	167-1500 (BE)	440	
JXC	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	92-3200	77-3200	236.7	6.50	190-1400 (BE)	440	
JXD	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	103-3200	87.5-3200	282.0	6.50	207-1400 (BE)	605	
JXL	6-4x4 $\frac{1}{2}$	113-3000	96-3000	320.0	6.50	204-1200 (BE)	605	
WXLG-3	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	131-3200	111-3200	339.0	6.50	272-1400 (BE)	630	
TDXB	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	161-2800	110-2800	404.0	6.50	312-1300 (BE)	825	
TDXC	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	181-2800	137-2800	474.0	6.50	366-1300 (BE)	1220	
RXC	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	170-2800	146-2800	501.0	6.50	388-1300 (BE)	1230	
RXLOH	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	143-2400	121-2400	529.0	6.30	372-1100 (BE)	1010	
HXE	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	181-2800	153-2800	558.0	6.50	443-1400 (BE)	1320	
HXLE	6-5 $\frac{1}{2}$ x6	227-2000	193-2000	935.0	6.20	760-900 (BE)	1830	
		272-2400	248-2400	935.0	6.40	780-1400 (BE)	2380	
INTERNATIONAL								
U-220	6-3 $\frac{1}{2}$ x3 $\frac{1}{2}$	72-2400	66-2400	220.5	6.50	177-1200 (BE)	810 ²	
U-264-6	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	83-2400	78-2400	264.0	7.00	190-1400 (BE)	975	
U-308	6-3 $\frac{1}{2}$ x4 $\frac{1}{2}$	92-2400	87.5-2400	308.0	6.50	230-1200 (BE)	1010	
U-372	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	110-2200	104-2200	372.1	6.50	298-1200 (BE)	1240 ²	
U-460	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	139-2200	126-2200	450.9	6.50	348-1350 (BE)	1260 ²	
U-601	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	141-2200	131-2200	501.0	6.50	394-1200 (BE)	1320	
UV-401	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	170-2800	160-2800	401.0	7.69	350-1900 (BE)	952	
UV-461	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	178-2800	170-2800	461.0	7.20	378-1900 (BE)	962	
UV-549	6-4 $\frac{1}{2}$ x5 $\frac{1}{2}$	222-2800	208-2800	549.0	7.00	490-1800 (BE)	1002	
LE ROI								
TH-340	6-4 $\frac{1}{2}$ x4 $\frac{1}{2}$	206-3000		540.0	6.70	450-1800 (BE)	1355	
TH-444	6-5 $\frac{1}{2}$ x4 $\frac{1}{2}$	286-3600	265-3600	844.0				



Geared by FULLER... 5-A-65 Transmissions specified in Brooks' order for 102 White Tractors

Officials of Brooks Transportation Co., a leading eastern trucking company with headquarters in Richmond, Virginia, gave careful consideration to every detail when the company ordered 102 new White Diesel Tractors. That's why 5-speed Fuller 5-A-65 Transmissions were specified for the entire fleet.

In Brooks' fleet . . . and in fleet after fleet on all the nation's highways . . . you'll find Fuller Transmis-

sions — transmissions that let the driver select the ratio he needs at the *right* time to meet every varying condition of time, traffic and terrain.

Wherever you see truly modern truck transportation, look for Fuller Transmissions . . . and whenever you see your truck dealer, ask him for full details on the most efficient, easiest-shifting Fuller Transmissions. Choose from 110 different models to meet your trucking requirements.

C. Fair Brooks, Jr., Vice-President of Brooks Transportation Co., Inc., and R. T. Mann, Secretary-Treasurer, discuss the Fuller 5-A-65 Transmissions in the 102 new White 9000 Tractors.



FULLER MANUFACTURING CO. Transmission Division • Kalamazoo, Mich.
Unit Drop Forge Div., Milwaukee 1, Wis. • Shaler Axle Co., Louisville,
Ky. (Subsidiary) • Sales & Service, All Products, West. Dist. Branch,
Oakland 8, Cal. and Southwest. Dist. Office, Tulsa 3, Okla.

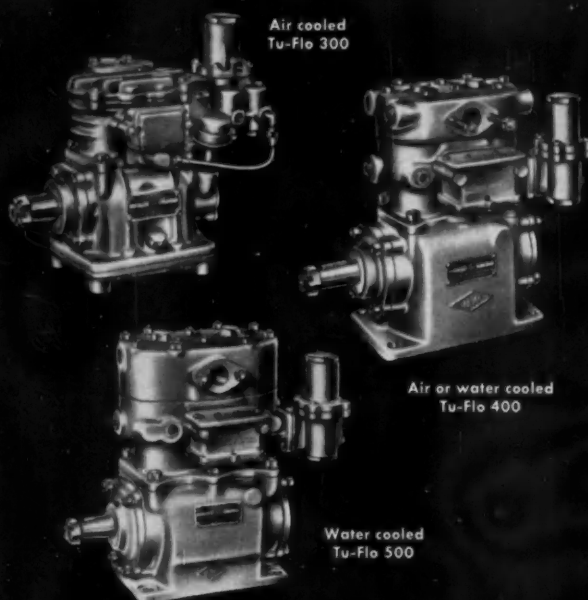
BEST WAY TO ASSURE SAFETY

Nowhere else do you find such a complete range of air brake equipment and services—all proved by the industry's longest list of satisfied customers...

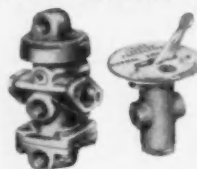
TU-FLO COMPRESSORS

Tu-Flo compressors offer you the peak performance, dependable operation and long service life you need for maximum braking safety at minimum cost. These industry-preferred compressors feature lower discharge temperatures over the entire speed range... increased air delivery at low and intermediate speeds... improved oil control... new design inlet valves and new unloading mechanism. They are built for operating at higher maximum speeds to match trends in engine design... are available with attached governor... may be driven in either direction.

All Bendix-Westinghouse air brake equipment is "system engineered"—each device is designed to perform a specific operation in a *closely related system* to assure maximum performance of the entire train of devices—and not merely individual unit performance.



AIR BRAKE ACCESSORIES



Tractor Protection Valve

Protect truck or tractor against loss of air pressure due to trailer break-away, system leakage, or improperly connected hose lines. Operates manually and/or fully automatically. Meets all safety regulation requirements.

Independent Trailer-Control Valve

Provides independent trailer braking on severe grades, ice, or other hazardous road conditions. Minimizes "jackknifing".

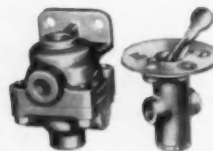


Stop Light Switch

Electro-pneumatic device operates in conjunction with brake valve and stop light by completing electrical connection the instant brakes are applied.

Air Horns

Finest warning signal on the highways. For either cab-roof or under-hood installation. In compact kit with optional hand or foot control.



Combined Limiting and Quick-Release Valve

Dash-mounted control gives driver choice of full front-wheel braking in "Dry Road" position or 50% front-wheel braking in "Slippery Road" position.

Low Pressure Indicator

Buzzer or jeweled light notifies driver instantly of any abnormal depletion of air either when the vehicle is in motion or when the ignition switch is turned on while parked.



IS BENDIX-WESTINGHOUSE AIR BRAKES



REPAIR EXCHANGE SERVICE

When your air brake equipment needs replacing, you can exchange the worn units at nominal cost for Factory Reconditioned Units carrying the same warranty as new units. This preventive maintenance service offers you reduced operating costs . . . assured dependability . . . and guaranteed first-class performance.

Bendix-Westinghouse Factory Reconditioned Units carry the same warranty as new units for very good reasons. The old compressors, valves, governors and other units are completely disassembled and examined by factory experts. All worn or deteriorated parts are replaced. All other parts are fully reconditioned before the unit is reassembled and tested the same as new units.

AUTHORIZED DISTRIBUTORS

No matter where you are located, a Bendix-Westinghouse authorized distributor is close at hand. He maintains a complete stock of genuine service parts for all Bendix-Westinghouse air brake equipment. His factory trained mechanics and maintenance facilities offer you service that assures low-cost, dependable operation of your air brakes. See your nearby Bendix-Westinghouse distributor!

Bendix-Westinghouse

AIR BRAKES



Bendix-Westinghouse Automotive Air Brake Co.

General offices and factory: Elyria, Ohio

Branches: Berkeley, California; Oklahoma City, Oklahoma

TRANSMISSION RATIOS

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SPICER	240, 242
WARNER	242
WATSON	242

Model	No. Speeds	Direct Drive In	Over Drive In	GEAR RATIOS										Low Rev.	High Rev.	Installation Dimension Inches	Weight Lbs.	Control C-Center F-Forward R-Reverse	Clutch Housing Size	Oil Capacity In Pints	PTO Opening	Relative Speed PTO Gear to Input RPM	
				1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th									Right	Left
FULLER																							
4-A-86	4	4th		6.54	3.27	1.76	1.00							7.24	23 1/2	420	Cor R	1.2	17	R & L	.553	.553	
4-B-86	4	4th		5.85	3.27	1.76	1.00							6.58	23 1/2	420	Cor R	1.2	17	R & L	.553	.553	
4-A-960	4	3rd	4th	3.72	1.86	1.00	(a)							4.12	23 1/2	420	Cor R	1.2	17	R & L	.973	.973	
4-A-112	4	4th		6.54	3.27	1.76	1.00							6.49	25 1/2	525	For R	1.2	21	R & L	.553	.302	
4-T-112 Opt.	4	4th		6.54	3.08	1.76	1.00							5.06	25 1/2	525	For R	1.2	21	R & L	.553	.387	
4-F-1440	4	3rd	4th	3.06	1.78	1.00	.90							3.06	31 1/2	775	For R	1	24	R & L	.816	.544	
4-MS-1440	4	3rd	4th	1.98	1.40	1.00	.71							1.81			722	For R	1	24	R & L	.92	.795
4-MB-1440	4	3rd	4th	2.72	1.58	1.00	.71							2.72			722	For R	1	24	R & L	.92	.813
5-A-33	5	5th		7.82	4.30	2.52	1.41	1.00						7.37	20 1/2	210	Cor R	2.3, 4	11	R	.271		
5-A-330	5	5th		6.06	3.48	1.90	1.00	.77						5.96	20 1/2	210	Cor R	2.3, 4	11	R	.336		
5-B-33	5	5th		7.53	4.30	2.52	1.42	1.00						7.37	20 1/2	218	Cor R	2.3, 4	11	R & L	.465	.465	
5-B-330	5	5th		6.10	3.48	1.795	1.00	.768						5.96	20 1/2	218	Cor R	2.3, 4	11	R & L	.575	.575	
5-A-43	5	5th		8.03	4.61	2.46	1.41	1.00						8.50	4.7 1/2	22 1/2	330	Cor R	1.2, 3	16	R & L	.445	.445
5-A-430	5	5th		6.52	3.33	1.77	1.00	.771						6.50	3.33 1/2	330	Cor R	1.2, 3	16	R & L	.544	.285	
5-A-62	5	5th		8.06	4.67	2.62	1.38	1.00						8.12	4.74 1/2	24 1/2	370	Cor R	1.2, 3	24	R & L	.429	.429
5-A-620	5	5th		7.07	3.80	1.72	1.00	.78						7.11	3.55 1/2	24 1/2	370	Cor R	1.2, 3	24	R & L	.489	.489
5-A-65	5	5th		8.06	4.67	2.62	(c)	1.00						8.12	4.74 1/2	24 1/2	411	For R	1.2	24	R & L	.429	.429
5-A-650	5	5th		6.37	3.40	1.74	1.00	.768						6.40	3.59 1/2	24 1/2	411	For R	1.2	24	R & L	.543	.543
5-C-65	5	5th		5.08	4.67	2.62	(c)	1.00						8.12	4.74 1/2	24 1/2	411	For R	1.2	24	R & L	.429	.429
5-C-650	5	5th		6.37	3.40	1.74	1.00	.768						6.40	3.59 1/2	24 1/2	411	For R	1.2	24	R & L	.543	.543
5-C-72	5	5th		7.33	4.43	2.62	(c)	1.00						7.33	25 1/2	465	Cor R	1.2	24	R & L	.429	.229	
5-C-720	5	5th		6.37	3.40	1.74	1.00	(e)						6.42	25 1/2	465	Cor R	1.2	24	R & L	.543	.291	
5-A-1120	5	5th		6.54	3.27	1.76	1.00	.744						6.49	31 1/2	681	For R	1.2	25	R & L	.553	.302	
5-A-1120 Opt.	5	5th		6.54	3.08	1.76	1.00	.636						5.06	31 1/2	681	For R	1.2	25	R & L	.553	.387	
5-F-1220	5	5th		6.54	3.356	1.748	1.00	.744						5.06	31 1/2	687	For R	1	25	R & L	.553	.387	
5-F-1220 Opt.	5	5th		6.54	3.356	1.748	1.00	.636						6.49	31 1/2	687	For R	1	25	R & L	.553	.387	
10-FA-65*	10	10th		18.567	10.731	6.02	3.17	2.298	1.00	4.67	2.62	1.38	1.00	18.559	8.12	30 1/2	768	For R	1.2	31	R & L	.429	.429
10-FA-650* Opt.	10	10th		18.567	10.731	6.02	3.17	2.298	1.00	4.67	2.62	1.38	1.00	18.559	8.12	30 1/2	768	For R	1.2	31	R & L	.429	.429
10-FA-650*	10	10th		18.567	10.731	6.02	3.17	2.298	1.00	4.67	2.62	1.38	1.00	18.559	8.12	30 1/2	768	For R	1.2	31	R & L	.429	.429
10-FB-65	10	10th		10.609	6.06	6.13	4.67	3.44	2.82	2.219	1.09	1.313	1.00	10.661	8.12	30 1/2	768	For R	1.2	31	R & L	.429	.429
10-FB-650	10	10th		10.609	6.06	6.13	4.67	3.44	2.82	2.219	1.09	1.313	1.00	10.661	8.12	30 1/2	768	For R	1.2	31	R & L	.429	.429
10-FB-65 Opt.	10	10th		10.609	6.06	6.13	4.67	3.44	2.82	2.219	1.09	1.313	1.00	10.661	8.12	30 1/2	768	For R	1.2	31	R & L	.429	.429
10-FA-650	10	10th		8.364	6.37	4.469	3.404	2.282	1.736	1.313	1.034	1.00	.768	8.403	6.40	30 1/2	768	For R	1.2	31	R & L	.543	.543
10-FA-650 Opt.	10	10th		8.364	6.37	4.469	3.404	2.282	1.736	1.313	1.034	1.00	.768	8.403	6.40	30 1/2	768	For R	1.2	31	R & L	.543	.543
10-CA-65*	10	10th		18.567	10.731	6.02	3.17	2.298	1.00	4.67	2.62	1.38	1.00	18.559	8.12	30 1/2	768	For R	1.2	31	R & L	.429	.429
10-CA-650*	10	10th		18.567	10.731	6.02	3.17	2.298	1.00	4.67	2.62	1.38	1.00	18.559	8.12	30 1/2	768	For R	1.2	31	R & L	.429	.429
10-CA-650* Opt.	10	10th		18.567	10.731	6.02	3.17	2.298	1.00	4.67	2.62	1.38	1.00	18.559	8.12	30 1/2	768	For R	1.2	31	R & L	.429	.429
10-CA-650*	10	10th		18.567	10.731	6.02	3.17	2.298	1.00	4.67	2.62	1.38	1.00	18.559	8.12	30 1/2	768	For R	1.2	31	R & L	.429	.429
10-CB-65	10	10th		10.609	6.06	6.13	4.67	3.44	2.82	2.219	1.09	1.313	1.00	10.661	8.12	30 1/2	768	For R	1.2	31	R & L	.429	.429
10-CB-65 Opt.	10	10th		10.609	6.06	6.13	4.67	3.44	2.82	2.219	1.09	1.313	1.00	10.661	8.12	30 1/2	768	For R	1.2	31	R & L	.429	.429
10-CB-650	10	10th		10.609	6.06	6.13	4.67	3.44	2.82	2.219	1.09	1.313	1.00	10.661	8.12	30 1/2	768	For R	1.2	31	R & L	.429	.429
10-CB-650 Opt.	10	10th		10.609	6.06	6.13	4.67	3.44	2.82	2.219	1.09	1.313	1.00	10.661	8.12	30 1/2	768	For R	1.2	31	R & L	.429	.429
10-FA-650	10	10th		8.364	6.37	4.469	3.404	2.282	1.736	1.313	1.034	1.00	.768	8.403	6.40	30 1/2	768	For R	1.2	31	R & L	.543	.543
10-FA-650 Opt.	10	10th		8.364	6.37	4.469	3.404	2.282	1.736	1.313	1.034	1.00	.768	8.403	6.40	30 1/2	768	For R	1.2	31	R & L	.543	.543
10-FA-650*	10	10th		15.04	7.52	4.05	2.30	1.711	1.04	3.27	1.76	1.00	.744	14.93	6.49	43 1/2	960	For R	1.2	35	R & L	.553	.302
10-FA-650* Opt.	10	10th		15.04	7.52	4.05	2.30	1.711	1.04	3.27	1.76	1.00	.744	14.93	6.49	43 1/2	960	For R	1.2	35	R & L	.553	.387
10-B-1120	10	10th		8.98	6.54	4.04	3.00	2.31	1.76	1.31	1.00	.636	6.52	6.40	43 1/2	960	For R	1.2	35	R & L	.553	.302	
10-B-1120 Opt.	10	10th		8.98	6.54	4.04	3.00	2.31	1.76	1.31	1.00	.636	6.52	6.40	43 1/2	960	For R	1.2	35	R & L	.553	.387	
10-F-1220	10	10th		8.98	6.54	4.04	3.00	2.31	1.76	1.31	1.00	.636	6.52	6.40	43 1/2	960	For R	1.2	35	R & L	.553	.387	
10-F-1220 Opt.	10	10th		8.98	6.54	4.04	3.00	2.31	1.76	1.31	1.00	.636	6.52	6.40	43 1/2	960	For R	1.2	35	R & L	.553	.387	
R-35	7	7th		6.20	4.97	3.323	2.298	2.298	1.740	1.313	1.00	.636	.636	5.029	3.83	43 1/2	982	For R	1	35	R & L	.553	.387
R-35 Opt.	7	7th		6.20	5.18	3.30	2.42	1.79	1.33	1.00				7.63	26 1/2	375	Cor R	2.3	16	R & L	.488*	.217	
R-630-D	10	10th		7.62	4.82	3.06	2.25	1.67	1.24	1.00				7.09	26 1/2	375	Cor R	2.3	16	R & L	.525*	.233	
R-46	10	10th		9.90	7.62	5.05	4.61	3.63	2.73	2.10	1.64	1.27	1.00	11.54	3.18	37 1/2	657	Cor R	1.2	30	R & L	.628	.628
R-46 Opt.	10	10th		7.63	5.96	4.61	3.63	2.73	2.10	1.64	1.27	1.00	.78	11.54	3.18	37 1/2	657	Cor R	1.2	30	R & L	.628	.628
R-86	10	10th		9.78	6.98	4.99	3.68	2.68	1.90	1.36	1.00			11.01	2.99	29 1/2	457	For R	1.2	17	R & L	.71	.71
R-860	10	10th		9.15	6.53	4.67	3.68	2.69	1.76	1.27	1.00			10.30	2.80	29 1/2	457	For R	1.2	17	R & L	.71	.71
R-1550	10	10th		9.05	7.43	5.00	4.40	3.54	2.73	2.10	1.64	1.27	1.00	11.26	3.18	38 1/2	767	Cor R	1.2	33	R & L</		

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The first and only all-brass solenoid switch especially designed for salt water marine service.

First solenoid that's completely rust-proof...for unparalleled durability and reliability under corrosive conditions.

Only 2 units fit-all 6 and 12 volt systems.

The first and only million mile guaranteed coil for trucks, tractors and other heavy duty service.

COMPLETELY WATER-PROOF...from Snorkel-type lead entries to seamless rust-resistant case.

MILLION MILE LIFE—WITH GREATER EFFICIENCY

"Flash-over-proof" high tension tower with vibration-proof connector.

Neoprene insulated leads.

5 times the heat dissipation of conventional coils.

Low current draw for fastest cold weather starting.

No "hot spots"—minimum electrical loss.

Extra amounts of copper in windings.

first with the Million Mile All-Weather COIL

...first, again, with the All-Brass All-Weather SOLENOID

Again, Filko scores another first with a perfect start and go team for all-weather, heavy duty service! The new Filko Solenoid Switch is the first all-brass unit ever developed. Like the Million Mile Guaranteed All-Weather Coil, it typifies Filko's leadership, not only in ignition for the passenger car field, but also in the engineering of ignition for fleets, tractors, salt water marine and all other heavy duty applications.

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Warehouses in Los Angeles, Oakland, Miami, Fort Worth,
New York, Boston, Atlanta, Cleveland, Lubbock, Little
Rock, Philadelphia, Kansas City, Worcester, Mass., Seattle



Send for latest, complete Filko Ignition Catalog.

TRANSMISSION RATIOS, Continued from Page 240

TRANSMISSIONS MAKE AND MODEL	No. of Forward Speeds	Direct Drive on	GEAR RATIOS						Power Take-off, Opening
			Low	Second	Third	Fourth	Fifth	Reverse	
AUTOCAR									
BH-21 Aux.	3	2	1.33	1.00	.85				R
BH-21 Aux.	2	2	1.47	1.00					R
CHEVROLET									
3-Speed	3	3	2.94	1.88	1.00			2.94	No
3-Speed H. D.	3	3	3.17	1.75	1.00			3.76	No
4-Speed	4	4	7.06	3.66	1.71	1.00		6.78	No
5-Speed	5	5	7.41	4.05	2.40	1.48	1.00	7.95	R-L
Powermatic (a)	5	5	5.298	3.31	2.69	1.938	1.39	6.042	No
Hydra-Matic (with V-8)	4	4	3.82	2.83	1.45	1.00		4.30	No
(with L-8)	4	4	4.71	3.03	1.56	1.00		6.11	No
CLARK									
204-V.	5	5	7.58	4.38	3.05	1.72	1.00	7.51	R-L
204-V.	5	5	6.06	3.50	1.80	1.00		7.99	R-L
205-V.	5	5	7.58	4.38	2.40	1.48	1.00	7.51	R-L
205-V.	5	5	6.06	3.50	1.80	1.00		7.99	R-L
207-V.	5	5	6.06	3.50	1.80	1.00		7.99	R-L
230-F.	4	4	5.00	3.07	1.71	1.00		5.83	R-L
231-F.	4	4	6.35	3.90	1.97	1.00		7.41	R-L
233-F.	4	4	6.35	3.38	1.73	1.00		7.41	R-L
250-V.	5	5	7.06	4.05	2.37	1.47	1.00	7.02	R-L
251-V.	5	5	6.06	3.50	1.80	1.00		7.99	R-L
264-V.	5	5	7.58	4.38	3.05	1.72	1.00	7.51	R-L
264-V.	5	5	6.06	3.50	1.80	1.00		7.99	R-L
285-V-1.	5	5	7.58	4.38	2.40	1.48	1.00	7.51	R-L
287-V-1.	5	5	6.06	3.50	1.80	1.00		7.99	R-L
287-V-1.	5	5	6.06	3.50	1.80	1.00		7.99	R-L
280-V.	5	5	7.58	4.41	2.63	1.48	1.00	7.58	R-L
280-V.	5	5	7.06	4.05	2.37	1.47	1.00	7.02	R-L
291-V.	5	5	7.00	3.93	2.34	1.54	1.00	7.00	R-L
292-V.	5	5	7.00	3.93	1.90	1.00		7.00	R-L
293-V.	5	5	7.58	4.68	2.84	1.68	1.00	7.58	R-L
300-V.	5	5	7.87	4.41	2.63	1.48	1.00	7.87	R-L
300-V.	5	5	6.27	3.51	1.89	1.00		6.27	R-L
303-V.	5	5	7.87	4.68	2.84	1.68	1.00	7.87	R-L
309-V.	5	5	7.87	4.68	2.84	1.68	1.00	7.87	R-L
326-V.	5	5	8.05	4.34	2.80	1.67	1.00	8.05	R-L
326-V.	5	5	7.06	3.82	1.85	1.00		7.06	R-L
330-F.	4	4	4.86	3.09	1.73	1.00		4.06	No
334-F.	4	4	4.35	2.75	1.71	1.00		3.62	No
400-V.	5	5	7.83	4.52	2.54	1.47	1.00	7.63	R-L
400-V.	5	5	6.17	3.56	1.90	1.00		6.17	R-L
403-V.	5	5	7.83	4.52	2.54	1.47	1.00	7.63	R-L
405-V.	5	5	6.17	3.56	2.11	1.43	1.00	6.02	R-L
For 10-speed models, see page 240.									
DODGE									
Own PC.	3	3	2.5	1.68	1.00			3.21	No
NP-8905.	3	3	3.3	1.78	1.00			4.3	No
NP-420.	4	4	6.68	3.10	1.69	1.00		8.25	R
NP-540.	5	5	7.41	4.06	2.40	1.48	1.00	7.88	R-L
Lead Flite.	3	3	2.45	1.45	1.00			2.20	No
Toromatic.	3	3	2.45	1.45	1.00			2.20	No
FORD									
WJ-7003-D-B-G (b)	3	3	2.78	1.62	1.00			3.375	No
WAK-7003-D-B-G (b)	3	3	2.574	1.634	1.00			3.125	No
TBAK, TAHAA-7004-A.	3	3	3.17	1.75	1.00			3.76	No
TCAK-7004-A.	3	3	3.71	1.87	1.00			4.59	No
TDAR, THAK.									
TACAA-7004-A.	4	4	6.40	3.09	1.69	1.00		7.82	R
TYBJ-7004-A.									
TACAA-B.	5	5	7.41	4.05	2.40	1.48	1.00	7.85	R-L
TYBJ-B, TACAA-C.	5	5	6.06	3.31	1.85	1.00		8.42	R-L
TGBP-7004-A.	5	5	7.06	4.09	2.38	1.47	1.00	7.012	R-L
TGBP, TGBV-7004-B.	5	5	6.06	3.50	1.80	1.00		7.99	R-L
TGBV-7004-A.	5	5	7.58	4.38	2.40	1.48	1.00	7.51	R-L
TGBJ-7004-E.	5	5	7.40	4.00	2.47	1.46	1.00	7.84	R-L
TGBJ-7004-F.	5	5	6.10	3.30	1.81	1.00		8.6	R-L
TGBV-7004-C (c).	5	5	9.78	6.98	4.99	3.68	2.66	11.01	R-L
TVAA-77900-A Aux.	3	2	1.27	1.00	.85				R-L
TVAA-77900-B Aux.	3	2	2.00	1.00	.73				R-L
PBN-7000-A-B (d).	5	5	5.29	3.51	2.69	1.94	1.39	6.04	R-L
FWD									
Series 271 Aux.	2	2	1.25	1.00					
Series 272 Aux.	2	2	2.82	1.00					
Series 371 Aux.	2	2	1.25	1.00					
Series 372 Aux.	2	2	2.82	1.00					
SPICER									
2531	3	3	3.88	1.73	1.00			1.00	No
3331 (Synchro).	3	3	3.80	1.91	1.00			4.24	No
3541	4	4	4.57	2.42	1.73	1.00		4.07	R-L
6241	4	4	6.53	3.19	1.70	1.00		7.53	R-L
6241-A.	4	4	7.15	3.44	1.83	1.00		8.13	R-L
6241-B.	4	4	4.32	2.67	1.66	1.00		4.90	R-L
6241-C.	4	4	3.90	2.42	1.52	1.00		4.43	R-L
6440	4	4	3.90	1.88	1.00			4.43	R-L
8041, 8045	4	4	6.25	3.47	1.78	1.00		7.38	R-L
8241, 8245	4	4	5.19	2.85	1.72	1.00		5.31	R-L
8440, 8445	4	4	3.67	1.95	1.00			3.75	R-L
8440-A, 8445-A.	4	4	3.67	1.95	1.00			3.75	R-L
3152*	5	5	7.55	4.17	2.45	1.45	1.00	7.44	R-L
3152-A*	5	5	6.00	3.31	1.94	1.16	1.00	6.90	R-L
3153*	5	5	6.00	3.31	1.94	1.00		7.93	R-L
3453*	5	5	4.62	2.56	1.50	1.00		5.37	R-L
3556*	5	5	5.42	2.70	1.59	1.26	1.00	5.28	R-L
3556-A*	5	5	5.51	3.25	2.12	1.42	1.00	5.92	R-L
4652*	5	5	7.40	4.00	2.47	1.46	1.00	7.84	R-L
4652-A*	5	5	7.40	4.27	2.47	1.46	1.00	7.84	R-L
4652-B*	5	5	7.40	4.00	2.62	1.46	1.00	7.84	R-L
4652-C*	5	5	7.40	4.27	2.47	1.37	1.00	7.84	R-L
SPICER—Cont'd									
4752*	5	5	6.10	3.30	1.81	1.35	1.00	6.46	R-L
4753*	5	5	6.10	3.30	1.81	1.00		.77	R-L
4753-A*	5	5	6.10	3.30	1.81	1.00		.88	R-L
4756*	5	5	5.51	2.99	1.64	1.23	1.00	5.84	R-L
4756-A*	5	5	5.51	3.18	2.12	1.46	1.00	5.84	R-L
4852*	5	5	5.08	2.93	1.79	1.34	1.00	5.37	R-L
4852-A*	5	5	5.08	2.75	1.79	1.34	1.00	5.37	R-L
4853*	5	5	5.08	2.93	1.69	1.00		.78	R-L
4853-A*	5	5	5.08	2.93	1.51	1.00		.78	R-L
4853-B*	5	5	4.51	2.44	1.50	1.00		.84	R-L
4852*	5	5	7.31	4.09	2.41	1.44	1.00	7.33	R-L
4852-A*	5	5	7.31	4.38	2.41	1.44	1.00	7.33	R-L
4852-B*	5	5	7.31	4.38	2.71	1.61	1.00	7.33	R-L
4852-C*	5	5	6.07	3.40	1.79	1.34	1.00	6.09	R-L
4853*, 6455*	5	5	6.07	3.40	1.79	1.00		.78	R-L
6453-A*, 6455-A*	5	5	6.07	3.40	1.79	1.00		.78	R-L
6456*, 6456*	5	5	5.40	2.83	1.59	1.26	1.00	5.42	R-L
6852*, 6854*	5	5	5.08	3.05	1.78	1.33	1.00	5.10	R-L
6852-C*	5	5	5.08	2.67	1.69	1.33	1.00	5.10	R-L
6852-D*, 6854-D*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R-L
6852-E*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R-L
6852-F*, 6854-F*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R-L
6852-G*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R-L
6853*, 6855*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R-L
6853-A*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R-L
6853-B*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R-L
6853-C*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R-L
6853-D*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R-L
6853-E*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R-L
6853-F*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R-L
6853-G*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R-L
6853-H*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R-L
6853-I*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R-L
6853-J*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R-L
6853-K*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R-L
6853-L*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R-L
6853-M*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R-L
6853-N*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R-L
6853-O*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R-L
6853-P*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R-L
6853-Q*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R-L
6853-R*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R-L
6853-S*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R-L
6853-T*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R-L
6853-U*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R-L
6853-V*	5	5	5.71	3.00	1.78	1.34	1.00	5.73	R



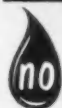
SPRING-BEAM TANDEM



NEWAY
Suspensions
**FOR HEAVY-
RUGGED DUTY**



**THREE
AXLE
SUSPENSION**



LUBRICATION
COMPLETELY RUBBER MOUNTED
RUGGED SIMPLIFIED DESIGN

NEWAY *Equipment Company*
NORFOLK, MICHIGAN, U.S.A.



**TWO SPRING
TANDEM**



- Controlled Deflection
- Load Stability
- No Axle Load Transfer
- Minimum Maintenance
- Many Years Proven Service
- Available Any Capacity



DESIGNERS • ENGINEERS • MANUFACTURERS OF SUSPENSIONS FOR TRAILERS • TRUCKS • SPECIALIZED EQUIPMENT

An "Automatic America a new

*Chevrolet—Dodge—Ford—GMC now offer
the Allison Fully Automatic Truck Transmission*

- A Rocky Mountain trucker cuts engine maintenance 50%
.....
- A West Coast contractor hauls 33⅓ % more payload per trip
.....
- A Utah ore hauler cuts brake maintenance 75%
.....
- A Michigan car-haul drives 100 extra miles per day
.....
- An Eastern sand hauler makes 3 trucks do the work of 4
.....

Allison

Brain" brings kind of Truck

No wonder truckers call the Allison Fully Automatic Truck Transmission "the most important development in 30 years for faster, safer, lower-cost trucking!"

No wonder four leading truck makers have engineered the Allison Automatic transmission into their newest medium and heavy-duty trucks.

The Allison Automatic can pay for itself in a year — pay for itself 5 to 10 times over during the life of your truck. It actually gives you *a new kind of truck*.

**It's more than a truck transmission
—it's an "Automatic Brain"**

On busy delivery routes, or over the open road, the driver simply selects the range. Then, the Allison "Automatic Brain" takes over.

It begins by multiplying engine torque 15 times. Out of mud and mire, up the steepest grade, the power to move the load is there—instantly!

It automatically senses the precise gear for any situation. Shifting is automatic—exact—every time.

Your engine can't lug or race. The Allison Automatic is virtually abuse-proof. It protects drive lines from shock loads—protects you from repair bills.

Its built-in Hydraulic Retarder saves you more than 50% on brake maintenance.

The Allison Automatic is the first automatic transmission specially designed to make full use of today's modern, high-torque engines—the only fully automatic transmission specially designed for medium and heavy-duty trucks.

It was born out of more than 10 years of service in the heaviest military and off-highway vehicles.

The Allison Fully Automatic Truck Transmission can repay its modest cost many times over in *your* trucking operation. See your dealer in Chevrolet, Dodge, Ford, and GMC. Or write:

ALLISON DIVISION OF GENERAL MOTORS, Indianapolis 6, Indiana

FULLY AUTOMATIC TRUCK *Transmissions*

3RD AXLES & TRAILER SUSPENSIONS

Trailing Axlespages 246, 250

Driving Axlespage 250

Trailer Suspensionspages 250, 254

THIRD AXLE MAKE AND MODEL and Truck Model Adapted to	Capacity (Lb.) See Explanatory Notes	Price (f. o. b. factory)	Weight (Lb.) with Max. Tires, Frame Extension, Etc.	Maximum Tire Size	LOAD DIS- TRIBUTION RANGE		Axle Spacing (in inches) (with maximum tire)	AXLE DATA			BRAKES (Standard)				Number of Points of Frame Support	Spring Size or Number Leaves Added	Spindle Diameter (at inner bearing)
					(First figure or combination applies to center axle; second figure to third axle)	Make		Type	Size	Make and Type	Drum Material	Brake Diameter and Width	Lining Area				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Trailing Axles																	
FABCO																	
1250 (All other makes)	13000		2000	9.00/20	50-44		48½	Var	T	4½	LH	CA	15x3½	192	2	53x2½	2H
1250 (F700 Ford)	13000		2500	9.00/20	50-44		48½	Var	T	4½	M	CA	16½x5	325	2	56x3	3
1250 (All other makes)	13000		2500	9.00/20	50-44		48½	Var	T	4½	M	CA	16½x5	325	2	56x3	3
1000 (F750-800-900 Ford)	14000		3000	11.00/22	56-44		48½	Var	T	4½	M	CA	16½x5	325	2	56x3	3
	14000		3000	11.00/22	56-44		52	Var	T	4½	M	CH	16½x6	435	2	60x3	3
1000 (All other makes)	14000		3000	11.00/22	56-44		48½	Var	T	4½	M	CA	16½x5	325	2	56x3	3
	14000		3000	11.00/22	56-44		52	Var	T	4½	M	CH	16½x6	435	2	60x3	3
Tractor Special	14000		2200	11.00/22	35-65		Var	Var	T	4½	M	Var	Var	435	2	Var	3
FRUEHAUF TONNAGE MASTER																	
A	18000		2900	11.00/22	50-50		Var	Frue	I	3½x4½	Tim	Var	16½x7	440	2	Var	3½
B	18000		2900	11.00/22	50-50		Var	Tim	T	5	Tim	Var	16½x7	440	2	Var	3½
GRICO SUPER-FLEX																	
Light duty	14000		2350	9.00/20	50-50		48½	SF	T	4½	H	CA	16x4	271	2	48, 18	
Medium duty	18000		2550	11/20-22	50-50		48½	Shu	T	5	H/AV	CA	Var	Var	2	48, 18	
Heavy duty	18000		2875	11/20-22	50-50		48½	Shu	T	5	AV	CA	Var	Var	2	48, 18	
HUTCHENS																	
H-100T (truck & trailer)††			949**	11.00/22	50-50	52-48	50	Var	Var	Var	Var	Var	Var	Var	6	43½	
H-200T (truck & trailer)††			782**	11.00/22	50-50	54-48	50	Var	Var	Var	Var	Var	Var	Var	6	43½x3	
H-200WS (truck & trailer)††			1113**	11.00/22	50-50	50-50	100	Var	Var	Var	Var	Var	Var	Var	8	43½x3	
H-300T (truck & trailer)††			796**	11.00/22	50-50	54-48	50	Var	Var	Var	Var	Var	Var	Var	6	43½x3	
H-700T (truck & trailer)††			680**	11.00/22	50-50	54-48	49	Var	Var	Var	Var	Var	Var	Var	6	42½x3	
H-700TUS (truck & trailer)††			984**	11.00/22	50-50	54-48	49	Var	Var	Var	Var	Var	Var	Var	6	42½x3	
H-700WS (truck & trailer)††			992**	11.00/22	50-50	50-50	108	Var	Var	Var	Var	Var	Var	Var	6	42½x3	
H-700T (truck & trailer)			715**	11.00/22	50-50	54-48	49	Var	Var	Var	Var	Var	Var	Var	6	42½x3	
H-800 (trailer)			850**	11.00/22	50-50	50-50	48	Var	Var	Var	Var	Var	Var	Var	2	81½x5	
LITTLE GIANT																	
A	11000		1920	8.25/20	53-47	42	42	Own (g)	Sq	2½	WagH	CA	15x4	253.5	2	42x2½	2H
B	13000		2450	9.00/20	50-50	44	44	Own (g)	Sq	3	WahH	CA	16x4	270.7	2	44x3	2H
C	15000		2850	10.00/20	50-50	44	44	Own (g)	Sq	3½	WagHA	CA	16x5	338	2	44x3½	3H
MAXI CORP. "MAXI"																	
15	13000		1800	7.50/20	55-45		45	Var	T	4½	Var	Var	Var	Var	1	45x3½	Var
15	13000		1800	8.25/20	55-45		45	Var	T	4½	Var	Var	Var	Var	1	45x3½	Var
15	13000		1800	9.00/20	55-45		45	Var	T	4½	Var	Var	Var	Var	1	45x3½	Var
15	15000		1800	8.25/20	55-45		45	Var	T	4½	Var	Var	Var	Var	1	45x3½	Var
15	15000		1800	9.00/20	55-45		45	Var	T	4½	Var	Var	Var	Var	1	45x3½	Var
20	18000		2100	10.00/20	52-48		48	Var	T	5	Var	Var	Var	Var	1	48x3½	Var
20	18000		2100	10.00/22	52-48		48	Var	T	5	Var	Var	Var	Var	1	48x3½	Var
20	18000		2100	11.00/20	52-48		48	Var	T	5	Var	Var	Var	Var	1	48x3½	Var
20	18000		2100	11.00/22	52-48		48	Var	T	5	Var	Var	Var	Var	1	48x3½	Var
20	20000		2250	11.00/20	52-48		48	Var	T	5	Var	Var	Var	Var	1	48x3½	Var
20	20000		2250	11.00/22	52-48		48	Var	T	5	Var	Var	Var	Var	1	48x3½	Var
NEWAY																	
TA-800 (Trailing)	18000		300**	11.00/22	40-60	50-80	48-50	Var	Var	Var	Var	Var	Var	Var	4		Var
TP-500 (Pusher)	9000		1000**	11.00/22	33-67		50	Own	Spec	Var	Var	Var	Var	Var	6		2H
REYCO																	
17214-1 (For any 1½-3 ton truck)	14000		881**	11.00/22	50-50	52-48	50½	Var	Var	Var	Var	Var	Var	Var	6	43½x3	
21218-1 (For any 3½-5 ton truck)	18000		815**	11.00/22	50-50	52-48	51	Var	Var	Var	Var	Var	Var	Var	6	43½x3	
21218-4 (For any 3½-5 ton truck)	18000		800**	11.00/22	50-50	52-48	51	Var	Var	Var	Var	Var	Var	Var	6	43½x3	
17222-1 (For trucks over 5 tons)	22000		1077**	11.00/22	50-50	52-48	50½	Var	Var	Var	Var	Var	Var	Var	6	43½x3	
SUPER LOAD BOOSTER (Pusher)**																	
LB 26 (C, D, F, V 1½ & 2 ton)	13000		2850	8.25/20	50-50		48	Own	T	4½	VH	CA	15x4	251	2	48x3½	2½
LB 30 (F Ford F700 & F750)	16000		2820	9.00/20	50-50		48	Own	T	5	VH	CA	16x5	345	2	48x3½	3
LB 30 (D, F, V 1½ & 2 ton)	15000		2820	9.00/20	50-50		48	Own	T	4½	VH	CA	15x4	251	2	48x3½	3
LB 34 (D, F, V 3 ton)	17000		3280	10.00/20	50-50		48	Own	T	5	VH or A	CA	16x5	345	2	48x3½	3½
LB 40 (D, F, V 3½ ton)	20000		3480	11.00/20	50-50		48	Own	T	5	VH or A	CA	16x6	370	2	48x3½	3½

Continued on Page 250

Column 1.—**—C—Chevrolet, D—Dodge, F—Ford, V—Various.

†—13,000 lb. axle available in 68.1 and 60.5 track.

††—Radius rod from drive axle to frame.

*—Single tire used on pusher axle only.

††—17,000 lb. axle available in 71.5 track.

Column 2.—Not to be confused with the total capacity made possible on the converted vehicle.

Column 4.—Weight of third axle unit includes all appurtenances and maximum tires.

*—Does not include axle.

**—Does not include frames, wheels, axles, etc.

***—Curb weight of complete six-wheeler truck.

*—Does not include axle, but includes weight transfer system and radius rods where applicable.

Column 9
Chev—Chevrolet
Shu—Shuler

Column 10
Tim—Timken
Wag—Wagner Hi-Tork

D—Driving
Ra—Rectangular
SF—Standard Forge

Sr—Solid round
Sq—Square
T—Tubular

A—Air
B—Bendix
C—Chevrolet
F—Ford
H—Hydraulic
L—Lockheed

C—Cast Iron
††—On application.

(a)—Long slip-spline joint supplied for drive axle in place of radius rods.

(b)—52½ x 51½.

(f)—Optional equipment.

(g)—Round, square or I-sectional axle.

(h)—Available with hand or electric cab-

Column 12
M—Mechanical
O—Own
V—Vacuum Power
W—Westinghouse
†—Own or Westinghouse optional

Column 13
CA—Cast Alloy Iron

(j)—Truckstell 4 in. I-section drop center rated 16,000 lb. for 4½ in. tube axle.

(k)—Light weight steel housing walking beam.

(n)—Truckstell 4½ in. I-section drop center rated 20,000 lb. for 5 in. tube axle.

(y)—Tandem Trac provides suspension for both axles with a new type of two-stage proportional springing with ample range from no-load to overload conditions.

Var—Various

(1)—A—16½x5½

(3)—A—16½x5

Column 15.—Attachment unit only.

operated hydraulic pump for transferring axle load for added traction or for raising axle clear of ground.

(j)—Truckstell 4 in. I-section drop center rated 16,000 lb. for 4½ in. tube axle.

(k)—Light weight steel housing walking beam.

(n)—Truckstell 4½ in. I-section drop center rated 20,000 lb. for 5 in. tube axle.

(y)—Tandem Trac provides suspension for both axles with a new type of two-stage proportional springing with ample range from no-load to overload conditions.

Var—Various

(1)—A—16½x5½

(3)—A—16½x5

Column 15.—Attachment unit only.



- 1** The buyer of a Continental "S" assembly receives full benefit of the advanced practices which maintain quality in new engines. Here spectrographic analysis is used to assure uniformity of quality.



- 2** Here gears are checked to plus-or-minus .0003, on the involute checker, while results are recorded on a continuous chart.



- 3** Live steam under high pressure removes all foreign matter from inside engine block.

- 4** End play is checked, and all lines are oil tested, just as in new engine assembly. Then bearing caps, cylinder heads, gear covers, and filler blocks are all torqued to specifications.

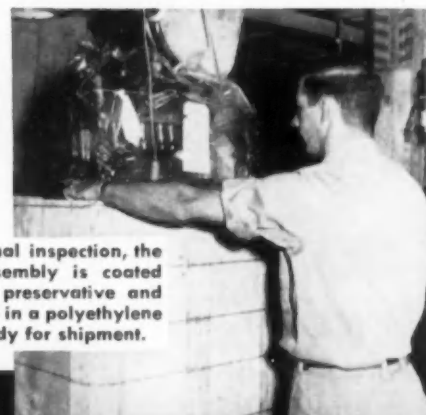


CONTINENTAL

"S" Assemblies

Cut Costly Down-Time

Every model in Continental's broad line of transportation engines is now available in "S" Assembly form—basic engine complete with cylinder-and-block assembly, oil pan, cylinder head, piston and valve assemblies, crankshaft, camshaft, gear cover, bearings and caps, crank and cam gears, and front end plate, fully assembled and torqued to specifications, ready to drop under the hood in an absolute minimum of time . . . An "S" Assembly usually costs less than the full overhaul it supplants, but the clinching point in its favor is the saving it effects in costly time out of use. Whether you operate a single unit or a fleet, it will pay you to investigate. Write for information.



- 5** After final inspection, the "S" assembly is coated with a preservative and encased in a polyethylene bag ready for shipment.

Continental
Motors Corporation

MUSKEGON • MICHIGAN

Now! The greatest concentration built into a truck engine!

Ford's all-new Super Duty V-8's—with displacements of 401, 477 and 534 cubic inches—are designed to handle GVW's up to 51,000 lb. and GCW's up to 75,000 lb. on America's toughest runs. And their endurance has been proved, not only in dynamometer labs and on the proving grounds, but in commercial fleets from coast to coast.

You get more miles with less downtime! These all-truck engines combine an entirely new concept of engine cooling with the latest developments in mechanical design and materials, setting new Ford standards of performance and dependability in heavy-duty truck service. Here is the "how and why" of Ford's superiority:

Exclusive three-stage cooling provides fast, uniform warm-up. Coolant flow is controlled by a second thermostat that balances the rate of warm-up and expansion of block and heads. Stress concentrations and the possibility of head warpage are virtually eliminated.

High-capacity water pump, the heart of Ford's cooling system, circulates over 200 gallons per minute. High volume coolant flow, with little or no aeration, supplies vital scrubbing action at valve guides and seats. Another advantage of this unique pump—its high capacity (50% more than competitive types) is obtained with no increase in required horsepower.

Water-jacketed fuel-air intake passages, in manifold and heads, maintain correct and uniform fuel temperatures from carburetor to combustion chambers. This results in proper va-

porization and equal distribution of fuel-air mixture to each cylinder for improved economy and maximum engine smoothness.

New "In Block" combustion chambers transfer heat concentration from heads to block for 360° chamber cooling. This transfer allows better cooling of head and valve areas, greatly increasing the life of these parts. Combustion heat absorbed by the head of the aluminum alloy piston is transferred to the long, solid piston skirt. From there it is readily dissipated through the cylinder wall into the coolant which surrounds cylinder throughout the entire length of piston travel. The result is long life pistons and rings.

Internally mounted oil cooler keeps oil at lower temperatures for better lubrication. Reduced oil temperatures maintain greater oil film strength and

reduce oil carbonization. Also, cooler oil means cooler running, longer lasting rod, main and camshaft bearings.

Fully machined combustion chambers mean close tolerances for accurate regulation of compression pressures. In Ford's new Super Duty V-8's, all surfaces of the combustion chamber (cylinder wall, bottom of head and top of piston) are precision-machined. Piston tops have a tapered step to maximize turbulence for improved combustion with regular grade gasoline. The smooth, straight surfaces of this wedge-shaped combustion chamber eliminate deposit-forming pockets to minimize harmful preignition.

Turbulence Top pistons have four rings and three of them, including the oil ring, are chrome-faced for long life. The top ring groove has a bonded cast-iron insert to further reduce wear. Piston tops are extra thick to withstand high compression pressures. Each piston contains thermal struts that control expansion for a precise fit, hot or cold.

Hard-faced intake and exhaust valves with wear-resistant valve seat inserts are a Ford exclusive. Valves are made of heat-resistant materials and heads are dish-shaped to allow them to seat readily. To minimize the possibility of sticking, valve stems are electrolized, a surface treatment previously restricted to aircraft engines. Positive rotators provide a self-cleaning action for

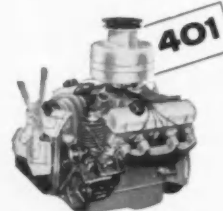
NOW!
Three all-new
all-truck
V-8's



277-hp Short Stroke V-8 . . .
Torque: 490 lbs.-ft @ 1800-2300 rpm



260-hp Short Stroke V-8 . . .
Torque: 430 lbs.-ft @ 1800-2300 rpm



226-hp Short Stroke V-8 . . .
Torque: 350 lbs.-ft @ 1800-2300 rpm

American Business buys more Ford Trucks than any other make!

of endurance features ever

They're all standard in

Ford's new Super Duty V-8's

more perfect seating and sealing. Any valve material requires good cooling for long life. Ford's new Super Duty engine design makes more coolant available for lower valve temperatures. This coolant flowing past Ford's integral valve guides quickly carries away valve heat. In addition, exhaust valves are sodium-filled for rapid transfer of heat from head to stem. The sodium is added by a unique process that eliminates welding, thereby strengthening the valves.

Hot testing of every Super Duty V-8 is a typical example of Ford's quality control. Each engine is run for 20 minutes to check smoothness, timing, valve lash adjustment, oil pressure, and push rod rotation.

The engine is then partially disassembled. Parts are inspected for condition and alignment. Special attention is given to bearings and other items that might cause premature failure. The engine is then reassembled and run for about 10 minutes to check timing, noise level, acceleration, smoothness and coolant, oil or compression leaks. Only Ford uses such a detailed inspection of every engine. This is done to provide you with a more dependable truck.

New submerged electric fuel pump virtually eliminates vapor lock and maintenance problems. Mounted in the bottom of the tank, it pushes solid fuel under pressure from tank to carburetor. Its electric motor is sealed in a stainless steel capsule, and operates the pump by magnetic drive.

Every engine part is a truck engine part designed and built exclusively for Ford's all-new Extra Heavy Duty

trucks. The same attention to detail required for durability in the major components has been carried over to all other parts as well. Listed below are but a few typical examples:

Stainless steel gaskets at heads and exhaust manifolds practically eliminate tie-ups due to blown gaskets.

No external oil lines to break. Oil filter and air compressor are mounted directly to block.

Valve stem seals are of same material developed for use in government missile program.

Rotor-type oil pump maintains high output, virtually unaffected by normal wear from extended operation.

Dual exhaust system provides far easier breathing and higher volumetric efficiency.

Alternator system replaces generator for longer electrical life.



Biggest Ford trucks ever built! Ten new series—Tilt Cabs, Conventional, Tandems—up to 51,000-lb. GVW, 75,000-lb. GCW. For complete information see your local Authorized Ford Dealer.

Big truck built... big truck powered... at Ford's low prices!

FORD TRUCKS COST LESS

LESS TO OWN . . . LESS TO RUN . . . LAST LONGER, TOO!

3RD AXLES & TRAILER SUSPENSIONS, Continued from Page 246

THIRD AXLE MAKE AND MODEL and Truck Model Adapted to	Capacity (Lb.) See Explanatory Notes	Price (f. o. b. factory)	Weight (Lb.) with Max. Tires, Frame Extension, Etc.	Maximum Tire Size	LOAD DIS- TRIBUTION RANGE		Axle Spacing (in inches) (with maximum tires)	AXLE DATA			BRAKES (Standard)				Number of Frame Support	Spring Size or Number Leaves Added	Spline Diameter (at inner bearing)
					(First figure or combination applies to center axle; second figure to third axle)	Make		Type	Size	Make and Type	Drum Material	Brake Diameter and Width	Lining Area				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
TANDEM TRAC (Pusher)																	
F-PD Light trucks	14000		1130**	9.00/20	38-62	50-50	50	Var	T	4 1/2	H	CA	15x4	236	2	(y)	2 1/4
F-PD Medium trucks	14000		1130**	9.00/20	38-62	50-50	50	Var	T	4 1/2	H	CA	16x5	315	2	(y)	2 1/4
F-PD Medium trucks	14000		1130**	9.00/20	38-62	50-50	50	Var	T	4 1/2	MA	CA	16 1/2x5	380	2	(y)	2 1/4
F-PD Heavy trucks	18000		1130**	10.00/20	38-62	50-50	50	Var	T	5	H	CA	16x5	315	2	(y)	3 1/4
F-PD Heavy trucks	18000		1130**	10.00/20	38-62	50-50	50	Var	T	5	MA	CA	16 1/2x5	380	2	(y)	3 1/4
TANDEM TRAC (Trailing Axes)																	
F-DT Light trucks	14000		1130**	9.00/20	62-38	50-50	50	Var	T	4 1/2	H	CA	15x4	236	2	(y)	2 1/4
F-DT Medium trucks	14000		1130**	9.00/20	62-38	50-50	50	Var	T	4 1/2	H	CA	16x5	315	2	(y)	2 1/4
F-DT Medium trucks	14000		1130**	9.00/20	62-38	50-50	50	Var	T	4 1/2	MA	CA	16 1/2x5	380	2	(y)	2 1/4
F-DT Heavy trucks	18000		1130**	10.00/20	62-38	50-50	50	Var	T	5	H	CA	16x5	315	2	(y)	3 1/4
F-DT Heavy trucks	18000		1130**	10.00/20	62-38	50-50	50	Var	T	5	MA	CA	16 1/2x5	380	2	(y)	3 1/4
TRUCKSTELL (Pusher)																	
Hydro-Trac Single Tire*	11000		665*	11.00/20	65-35	80-20h	50	Var	T	4 1/2	Var	Var	Var	Var	4	28x3 1/2k	Var
Chief-Ton Single Tire*	11000		545*	11.00/20	65-35	80-35	50	Var	T	4 1/2	Var	Var	Var	Var	4	28x3 1/2k	Var
Hydro-Trac Dual Tire	14000		680*	9.00/20	50-50	60-40h	50	Var	T	4 1/2	Var	Var	Var	Var	4	28x3 1/2k	Var
Chief-Ton Dual Tire	14000		560*	9.00/20	50-50	55-45	50	Var	T	4 1/2	Var	Var	Var	Var	4	28x3 1/2k	Var
Hydro-Trac Dual Tire	18000		680*	10.00/20	50-50	60-40h	50	Var	T	5n	Var	Var	Var	Var	4	28x3 1/2k	Var
Chief-Ton Dual Tire	18000		560*	10.00/20	50-50	55-45	50	Var	T	5n	Var	Var	Var	Var	4	28x3 1/2k	Var
Hydro-Trac Dual Tire	20000		680*	11.00/20	50-50	60-40h	50	Var	T	5n	Var	Var	Var	Var	4	28x3 1/2k	Var
Chief-Ton Dual Tire	20000		560*	11.00/20	50-50	55-45	50	Var	T	5n	Var	Var	Var	Var	4	28x3 1/2k	Var
TRUCKSTELL (Trailing Axle)																	
Hydro-Trac Dual Tire	14000		605*	9.00/20	50-50	60-40h	50	Var	T	4 1/2	Var	Var	Var	Var	4	28x3 1/2k	Var
Chief-Ton Dual Tire	14000		490*	9.00/20	50-50	55-45	50	Var	T	4 1/2	Var	Var	Var	Var	4	28x3 1/2k	Var
Hydro-Trac Dual Tire	18000		605*	10.00/20	50-50	60-40h	50	Var	T	5	Var	Var	Var	Var	4	28x3 1/2k	Var
Chief-Ton Dual Tire	18000		490*	10.00/20	50-50	55-45	50	Var	T	5	Var	Var	Var	Var	4	28x3 1/2k	Var
Hydro-Trac Dual Tire	20000		605*	11.00/20	50-50	60-40h	50	Var	T	5	Var	Var	Var	Var	4	28x3 1/2k	Var
Chief-Ton Dual Tire	20000		490*	11.00/20	50-50	55-45	50	Var	T	5	Var	Var	Var	Var	4	28x3 1/2k	Var
TRUCKTOR (s)																	
U. N. (Universal heavy duty)	18000		2480	11.00/20	50-50		50	Var	T	S	WAM	CA	16 1/2x8	451	6	40x3	2 1/4
UN-14	14000		1900	9.00/20	50-50		48	Var	T	3 1/2	Var	Var	Var	Var	6	44x2 1/2	2 1/4
UN-18	18000		2100	11.00/20	50-50		50	Var	T	5	Var	Var	Var	Var	6	44x3	3 1/4
UN-20	2000		2420	11.00/24	50-50		52	Var	T	5	Var	Var	Var	Var	6	44x3	3 3/4
UTILITY																	
25	8000		1410	8.25/20	55-45		41	Own	Sq	2 1/2	HV or A	CA	16x3 1/2	230	4	None	2 1/4
30	16500		2080	10.00/20	55-45	67-33	44	Own	Sq	3	HV or A	CA	16x5	300	4	None	2 1/4
35	20500		2525	11.00/24	55-45	67-33	50	Own	Sq	3 1/2	HV or A	CA	17x6	420	4	None	3
30S	16500		2410	10.00/20	55-45	67-33	44	Own	Sq	3 1/2	HV or A	CA	16x5	300	4	40x3	2 1/4
35S	20500		2920	11.00/24	55-45	67-33	50	Own	Sq	3 1/2	HV or A	CA	17x8	420	4	40x3	3
Driving Axles																	
FABCO																	
1550 (Ford, Chevrolet)	15000		2600	9.00/20	50-50		48 1/2	Ford	D		FH	CA	15x5	312	2	53x2 1/2	3
1550 (All other makes)	15000		2600	9.00/20	50-50		48 1/2	Match	D		Match	CA	Match	Var	2	53x2 1/2	3
2000 (F750 Ford)	15000		3200	10.00/20	50-50		48 1/2	Ford	D		FH	CA	15x5	312	2	56x3	3
2000 (F800, F900 Ford)	17000		3800	10.00/20	50-50		48 1/2	Ford	D		HorA	CA	16x5	312	2	56x3	3
2000 (All other makes)	20000		4000	11.00/20	50-50		48 1/2	Match	D		HorA	CA	Var	2	56x3	Var	
GRICO																	
16000		3250		9.00/20	50-50		48 1/2	Own	D		H	CA	15x4	251	2	48, 18	
THORNTON DRIVE																	
A2C30 Chev. 2 ton	15000		3500	8.25/20	50-50		52 1/2	Est	D	4 1/2	VH	CA	15x4	251	2	48x2 1/2	3 1/4
A9D30 Dodge FA, HA, JA	13000		3300	8.25/20	50-50		48	Dodge	D	4 1/2	VH	CA	16x3	251	2	48x2 1/2	2 1/4
A2 Various	13000		3300	8.25/20	50-50		48	Est	D	4 1/2	VH	CA	15x4	251	2	48x2 1/2	2 1/4
A2F30 Ford F500 & F600	13000		3300	8.25/20	50-50		48	Ford	D	4 1/2	VH	CA	15x4	251	2	48x2 1/2	2 1/4
A8F36 Ford F700 & F750	15000		3600	9.00/20	50-50		52 1/2	Est	D	4 1/2	VH	CA	15x4	251	2	48x2 1/2	3
A8 Various	15000		3600	9.00/20	50-50		52 1/2	Est	D	4 1/2	VH	CA	15x4	251	2	48x2 1/2	3
A6D35	15000		3600	9.00/20	50-50		52 1/2	Est	D	4 1/2	VH	CA	16x3	251	2	48x2 1/2	3
A15F41 Ford F800	17000		3700	10.00/20	50-50		52 1/2	Ford	D	5 1/2	VH or A	CA	16x5	345	2	48x2 1/2	3 1/4
A15 Various	17000		3700	10.00/20	50-50		52 1/2	Est	D	5 1/2	VH or A	CA	16x5	345	2	48x2 1/2	3 1/4
A14F41 Ford F800	17000		3800	10.00/20	50-50		52 1/2	Ford	D	5 1/2	VH or A	CA	16x5	345	2	48x2 1/2	3 1/4
A14 Various	17000		3800	10.00/20	50-50		52 1/2	Est	D	5 1/2	VH or A	CA	16x5	345	2	48x2 1/2	3 1/4
TRUCKSTELL																	
300 Ford F500	11000		7400	8.25/20	50-50		50	Ford	D	3 1/2-3 1/2	VFH	CA	14 1/2x3 1/2		2	85x2 1/2	2 1/4
300 Ford F600	13000		7800	8.25/20	50-50		50	Ford	D	3 1/2-4 1/2	VFH	CA	15x4		2	85x2 1/2	2 1/4
300 Chevrolet	13000		7800	8.25/20	50-50		50	Chev.	D	4	VCH	CA	15x4	251	2	85x2 1/2	2 1/4
300 Dodge B4J	13500		7800	8.25/20	50-50		50	Dodge	D	4 1/2	VDH	C	15x4	252	2	85x2 1/2	2 1/4
400 Ford F700 & F750	15000		9200	9.00/20	50-50		50	Ford	D	4 1/2	VFH	CA	15x5	312	2	60x3	3
400 Dodge B4K	15000		9200	9.00/20	50-50		50	Dodge	D	Re	VDH	C		252	2	60x3	
500 Dodge B4R	15000		9300	9.00/20	50-50		50	Dodge	D	Re	VDH	C	16 1/2x3 1/2	217	2	60x3	
500 Ford F800	17000		10300	10.00/20	50-50		50	Ford	D	5 1/2	VFH or A	CA	16x5(1)	Var	2	60x3	3 1/4
500 Chevrolet 90 & 1000	18000		10300	10.00/20	50-50		50	Chev.	D	5 1/2	VFH or A	CA	16x5(1)	Var	2	60x3	3 1/4
500 Dodge B4T	17000		10300	10.00/20	50-50		50	Dodge	D	Re	VDH or A	C	16 1/2x4(2)	Var	2	60x3	3 1/4
500 Ford F900	21000		10800	10.00/20	50-50		50	Ford	D	5 1/2	VFH or A	CA	16x6(3)	Var	2	80x3	3 1/4
Trailer Suspensions																	
GRICO																	
18000		3400		11/20 22	50-50		48 1/2	Shu	T	5	AV	CA	16 1/2x5-7	Var	2	48, 18	
HUTCHENS																	
H-100S (All makes)**			445**	11.00/22				Var	Var	Var	Var	Var	Var	Var	4	43 1/2x3	
H-200S (All makes)**			350**	11.00/22				Var	Var	Var	Var	Var	Var	Var	4	43 1/2x3	
H-200SOL (All makes)**	21000		434**	11.00/22				Var	Var	Var	Var	Var	Var	Var	4	43 1/2x3	
H-300S (All makes)**			352**	11.00/22				Var	Var	Var	Var	Var	Var	Var	4	43 1/2x3	
H-400 (All makes)**			1230**	11.00/22				Var	Var	Var	Var	Var	Var	Var	8	43 1/2x3	
H-700S (All makes)**			334**	11.00/22	50-50	54-48	50	Var	Var	Var	Var	Var	Var	Var	4	42 1/2x3	
H-700SUS (All makes)**			348**	11.00/22				Var	Var	Var	Var	Var	Var	Var	4	42 1/2x3	
H-700SOL (All makes)**	21000		413**	11.00/22				Var	Var	Var	Var	Var	Var	Var	4	42 1/2x3	
H-700-3 axle (All makes)**			1046**	11.00/22	50-50	54-46	50	Var	Var	Var	Var	Var	Var	Var	8	42 1/2x3	
H-700T (All makes)**			715**	11.00/22	50-50	54-48	49	Var	Var	Var	Var	Var	Var	Var	8	42 1/2x3	
H-900 (All makes)**			850**	11.00/22	50-50	50-50	46	Var	Var	Var	Var	Var	Var	Var	2	61 1/2x5	

Tru-Stop Brakes

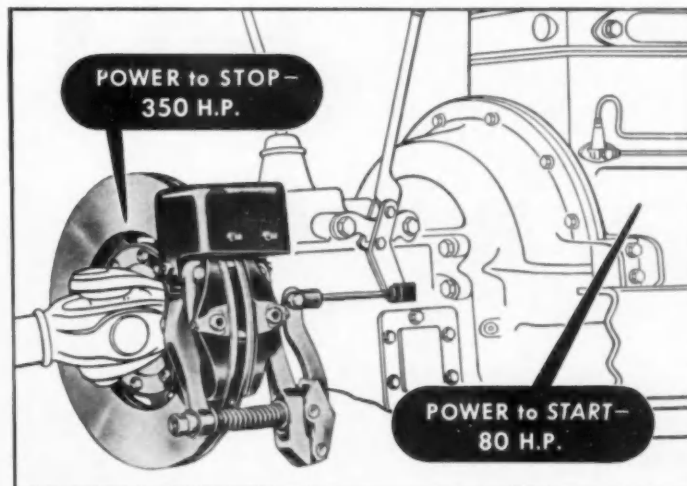
Meet Every Heavy-Duty Safety Requirement

**OFFER POSITIVE PROTECTION
AGAINST RUNAWAY OR PARKING
ACCIDENTS—AT LOWEST COST**

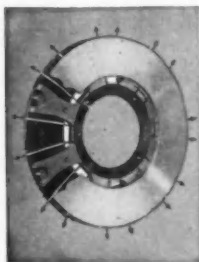
HERE IS WHY:

**They have surplus power
required for emergency
service—no dangerous
self-energizing**

TRU-STOP Heavy-Duty Emergency Brakes are not only excellent parking brakes. They serve as a complete, independent and fully reliable braking system. Operating on the propeller shaft they enable the driver to continue on safely in the event of service brake failure. TRU-STOP brakes have the surplus braking capacity to be used repeatedly as an auxiliary to service brakes.

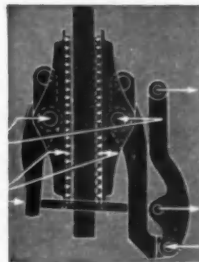


Brakes actually do more work than the engine in terms of horsepower. Where it takes 80 HP to accelerate to 20 miles per hour, it takes 350 HP to make a safe stop from 20 miles per hour within required limits.



Ventilated to throw off heat

Brake efficiency depends on ability to throw off intense heat—rapidly. Discs of TRU-STOP brakes are exposed to the air even during the braking operation. Ventilated design circulates air between the disc plates.



Give uniform brake pressure

Disc of TRU-STOP brakes is "squeezed" between the flat surface of the shoes. Effort applied to brake lever operates front and rear lever arms simultaneously. Pressure is exerted on the center of each shoe. Entire lining surface is in contact.

FOR SAFE, ECONOMICAL, HEAVY-DUTY BRAKING WITH MAXIMUM LIFE AND MINIMUM MAINTENANCE

TRU-STOP Brakes are used on a great variety of mobile and stationary equipment

SUCH AS—

Motor cranes
Road rollers
Dump trucks
Power dividers
Cooling tower fans
Oil well pumps
Cold header presses
Scrubbing machines
Wire rope stranders
Fork lift trucks
Motor scrapers

Tractors
Graders
Diamond core drills
Electric locomotives
Oil well servicing rigs
Railway inspection cars
Shapers
Power take-offs
Winches
Motor shovels

Tractor loaders
Conveyors
Hard rock drill positioners
Mine locomotives
Power presses
Railway power ballisters
Cable tool spudders
Aerial tram cars
Tension wire stringers

We will be glad to answer any questions or give you more detailed information about TRU-STOP Heavy Duty Emergency Brakes. Send for

Catalogs
DH-33
and
DH-530



Automotive and Aircraft Division AMERICAN CHAIN & CABLE

601 Stephenson Building, Detroit 2
2216 S. Garfield Street, Los Angeles 22 • Bridgeport 2, Conn.



NO.1 FOR THE ROAD NO.1 FOR CITY



What makes the GMC DF860 a Standout Money-Maker?

- Famed 6-71SE two-cycle Diesel engine • New fuel-saving 60E injectors • New Economy-Range Governor • Spacesaving 72-inch cab • New Hydraulic Power Steering*

**Optional at extra cost*

AD
Y

...

STREETS



America's leading lines team GMC Diesel haulers with GMC terminal trucks — top profit-making combination in the industry

IT'S THE hottest hauling combination anywhere today: GMC's famed DF860 for over-the-road work—teamed with the long-popular F370 for local cartage duties.

The proof is ample: The DF860 Diesel is again and again first choice of top lines like Cooper-Jarrett and Jack Cole Co.—reordering on the basis of their own experiences with this very model. This popularity is spreading, too—continually attracting new and famous names like Interstate Dispatch of Chicago.

In numerous cases, these big-name truck lines are also F370 fans. Boston's Terminal Cartage Corp., delivery subsidiary of 6 lines, is one of the newest. And this choice is solidly confirmed by fleet owners whose operation is almost 100% city stop-and-go—Pepsi-Cola Bottling Company of Tampa and P. Ballantine & Sons of New York, to mention several.

For long hauls and short hauls alike, they want GMC's standout economy. And the DF860 Diesel gives them just that—with economy-range-governed power that delivers top legal speeds with standout fuel mileage. The F370 is a real saver, too—thanks to its superlative power train that teams an ideal engine-transmission-axle combination for amazingly low-cost performance.

So—take your choice: The new “economy-engineered” DF860. The thrifty F370 city delivery specialist. Or a moneysaving combination of both. Reason aplenty you should see your GMC dealer!

GMC TRUCK & COACH—A General Motors Division

What makes the GMC F370 a Standout Money-Maker?

- Thrifty 140-h.p. Six or 200-h.p. V8 • Choice of timesaving, moneysaving Allison Torqmatic* or smooth-shifting Synchron Mesh transmissions • Spacesaving 89-inch cab to accommodate 16-foot van • Short-turning radius for easy parking and traffic work • New Hydraulic Power Steering* • Lower price tag than competitive trucks!

*Optional at extra cost

GMC—America's Ablest Trucks

½ TO 45 TONS



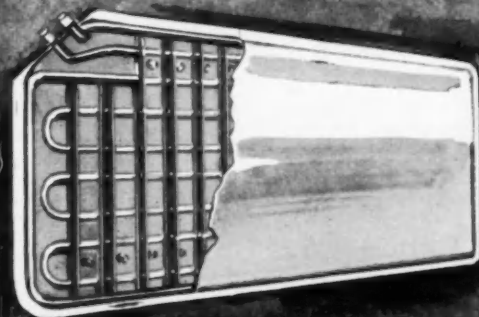
3RD AXLES & TRAILER SUSPENSIONS, Continued from Page 250

TRAILER SUSPENSIONS (continued)	Capacity (Lb.) See Explanatory Notes	Price (f. o. b. factory)	Weight (Lb.) with Max. Tires, Frame Extension, Etc.	Maximum Tire Size	LOAD DISTRIBUTION RANGE		Axle Spacing (in inches) (with maximum tire)	AXLE DATA				BRAKES (Standard)			Number of Points of Frame Support	Spring Size or Number Leaves Added	Spindle Diameter (at inner bearing)
					(First figure or combination applies to center axle; second figure to third axle)			Make	Type	Size	Make and Type	Drum Material	Brake Diameter and Width	Lining Area			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
NEWAY																	
426 (two spring tandem)	26000		650	12.00/20	50-50		44-44½	Var	Var	Var	Var	Var	Var	Var	2		Var
432 (two spring tandem)	34000		760	12.00/20	50-50		48-48½	Var	Var	Var	Var	Var	Var	Var	2		Var
436 (two spring tandem)	36000		780	12.00/20	50-50		48-48½	Var	Var	Var	Var	Var	Var	Var	2		Var
442 (two spring tandem)	42000		900	12.00/20	50-50		48-48½	Var	Var	Var	Var	Var	Var	Var	2		Var
536 (two spring tandem)	36000		800	12.00/20	50-50		50-51	Var	Var	Var	Var	Var	Var	Var	2		Var
542 (two spring tandem)	42000		825	12.00/24	50-50		50-51	Var	Var	Var	Var	Var	Var	Var	2		Var
650 (HD) (two spring tandem)	50000		1005	12.00/24	50-50		50-51	Var	Var	Var	Var	Var	Var	Var	2		Var
660 (HD) (two spring tandem)	60000		1155	12.00/24	50-50		53-53½	Var	Var	Var	Var	Var	Var	Var	2		Var
TL-636 (four spring tandem)	36000		690	12.00/24	50-50		50½	Var	Var	Var	Var	Var	Var	Var	6		Var
TL-644 (four spring tandem)	44000		690	12.00/24	50-50		50½	Var	Var	Var	Var	Var	Var	Var	6		Var
TL-650 (four spring tandem)	50000		690	12.00/24	50-50		50½	Var	Var	Var	Var	Var	Var	Var	6		Var
SL-616 (single axle)	18000		335	Var				Var	Var	Var	Var	Var	Var	Var	4		Var
SL-622 (single axle)	22000		335	Var				Var	Var	Var	Var	Var	Var	Var	4		Var
SL-625 (single axle)	25000		335	Var				Var	Var	Var	Var	Var	Var	Var	4		Var
SL-718 (single axle)	18000		430	Var				Var	Var	Var	Var	Var	Var	Var	4		Var
SL-722 (single axle)	22000		430	Var				Var	Var	Var	Var	Var	Var	Var	4		Var
SL-725 (single axle)	25000		430	Var				Var	Var	Var	Var	Var	Var	Var	4		Var
AR-2000 (tandem air suspension)	36000		770	11.00/22	50-50		50	Var	Var	Var	Var	Var	Var	Var	General Air Spring		
T-5750 (three axle)	75000		1390	Var			50-50	Var	Var	Var	Var	Var	Var	Var	8		
WB-4 (four axle walking beam)	100000		2300	Var	45-45-45		45 45 45	Var	Var	Var	Var	Var	Var	Var	2		
WB-40 (walking beam tandem)	40000		840	Var	50-50			Var	Var	Var	Var	Var	Var	Var	2		
WB-50 (walking beam tandem)	50000		850	Var	50-50			Var	Var	Var	Var	Var	Var	Var	2		
WB-60 (walking beam tandem)	60000		949	Var	50-50			Var	Var	Var	Var	Var	Var	Var	2		
WB-78 (walking beam tandem)	70000		1050	Var	50-50			Var	Var	Var	Var	Var	Var	Var	2		
NN-660 (widespread tandem)	40000		775	11.00/22	50-50		74	Var	Var	Var	Var	Var	Var	Var	4		
NN-960 (widespread tandem)	40000		915	11.00/22	50-50		110	Var	Var	Var	Var	Var	Var	Var	4		
NN-1060 (widespread tandem)	40000		950	11.00/22	50-50		116	Var	Var	Var	Var	Var	Var	Var	4		
NN-1160 (widespread tandem)	40000		1050	11.00/22	50-50		138	Var	Var	Var	Var	Var	Var	Var	4		
NN-900 (widespread tandem)	40000		1600	11.00/22	50-50		110	Var	Var	Var	Var	Var	Var	Var	4		
SB-350 (spring beam tandem)	36000		710	Var	50-50		49½	Var	Var	Var	Var	Var	Var	Var	2		
SB-500 (spring beam tandem)	50000		710	Var	50-50		49½	Var	Var	Var	Var	Var	Var	Var	2		
SB-600 (spring beam tandem)	60000		745	Var	50-50		(b)	Var	Var	Var	Var	Var	Var	Var	2		
T-6644-A (three axle)	80000		1045	Var			44½	Var	Var	Var	Var	Var	Var	Var	8		
T-6644-A (three axle)	60000		1170	Var			44½	Var	Var	Var	Var	Var	Var	Var	8		
T-6500-A (three axle)	50000		1165	Var			50½	Var	Var	Var	Var	Var	Var	Var	8		
T-6800-A (three axle)	60000		1260	Var			50½	Var	Var	Var	Var	Var	Var	Var	8		
T-6750-A (three axle)	75000		1390	Var			50½	Var	Var	Var	Var	Var	Var	Var	8		
NEYCO																	
30118-1 (Single)	18000		328**	11.00/22				Var	Var	Var	Var	Var	Var	Var	4	42½x3	Var
30118-3 (Single)	18000		337**	11.00/22				Var	Var	Var	Var	Var	Var	Var	4	42½x3	Var
17114-1 or 3 (Single)	14000		415**	11.00/22				Var	Var	Var	Var	Var	Var	Var	4	43½x3	Var
21118-1 or 3 (Single)	16000		404**	11.00/22				Var	Var	Var	Var	Var	Var	Var	4	43½x3	Var
21118-1 US (Single for Low Boy)	18000		454**	11.00/22				Var	Var	Var	Var	Var	Var	Var	4	43½x3	Var
17122-1 or 3 (Single)	22000		517**	11.00/22				Var	Var	Var	Var	Var	Var	Var	4	51½x3	Var
1300-25 (Single)	25000		565**	11.00/22				Var	Var	Var	Var	Var	Var	Var	4	44x3	Var
17214-1 (Tandem)	28000		881**	11.00/22	50-50	52-48	50½	Var	Var	Var	Var	Var	Var	Var	6	43½x3	Var
21218-1 (Challenge Tandem)	36000		823**	11.00/22	50-50	50-50	51	Var	Var	Var	Var	Var	Var	Var	6	43½x3	Var
21218-3 (Revolastic Bearing)	36000		860**	11.00/22	50-50	50-50	51	Var	Var	Var	Var	Var	Var	Var	6	43½x3	Var
21218-5 (Revolastic Bearing)	36000		947**	11.00/22	50-50	50-50	51	Var	Var	Var	Var	Var	Var	Var	6	43½x3	Var
21218-1A8, -348 A, B & C	36000		815**	11.00/22	50-50	50-50	51	Var	Var	Var	Var	Var	Var	Var	6	43½x3	Var
21218-1 US (Tandem for Low Boy)	36000		949**	11.00/22	50-50	50-50	51	Var	Var	Var	Var	Var	Var	Var	6	43½x3	Var
21218-ABW (For End Dump Trlr.)	36000		872**	11.00/22	50-50	50-50	51	Var	Var	Var	Var	Var	Var	Var	6	43½x3	Var
17222-1 (Heavy Duty Tandem)	44000		1077**	11.00/22	50-50	52-48	50½	Var	Var	Var	Var	Var	Var	Var	6	43½x3	Var
24218-1 (Tand. Lg.-Boy 127-74 in.)	36000		1037**	11.00/22	50-50	50-50	110	Var	Var	Var	Var	Var	Var	Var	6	43½x3	Var
30218-1 (Champion Tandem)	36000		662**	11.00/22	50-50	50-50	48½	Var	Var	Var	Var	Var	Var	Var	6	42½x3	Var
30218-3 (Champion Tandem)	36000		678**	11.00/22	50-50	50-50	48½	Var	Var	Var	Var	Var	Var	Var	6	42½x3	Var
17318-1 or 3 (Tri-Axle)	54000		1430**	11.00/22			50½	Var	Var	Var	Var	Var	Var	Var	8	43½x3	Var
21318-1 or 3 (Tri-Axle)	54000		1255**	11.00/22			51	Var	Var	Var	Var	Var	Var	Var	8	43½x3	Var
30318-1 or 3 (Tri-Axle)	54000		1080**	11.00/22			48½	Var	Var	Var	Var	Var	Var	Var	8	42½x3	Var
SIX WHEELS INC.																	
2-15	26000		2300	8.25/20	50-50		45	Var	T	4½	Var	Var	Var	Var	1	48x3½	Var
2-18	26000		2300	9.00/20	50-50		45	Var	T	4½	Var	Var	Var	Var	1	48x3½	Var
2-18	26000		2300	10.00/20	50-50		45	Var	T	4½	Var	Var	Var	Var	1	48x3½	Var
2-15	32000		2450	8.00/20	50-50		45	Var	T	4½	Var	Var	Var	Var	1	48x3½	Var
2-18	32000		2450	10.00/20	50-50		45	Var	T	4½	Var	Var	Var	Var	1	48x3½	Var
2-20	36000		2600	10.00/20	50-50		48	Var	T	5	Var	Var	Var	Var	1	48x3½	Var
2-20	36000		2600	10.00/22	50-50		48	Var	T	5	Var	Var	Var	Var	1	48x3½	Var
2-20	50000		2850	10.00/22	50-50		48	Var	T	5	Var	Var	Var	Var	1	48x3½	Var
2-20	50000		2850	10.00/22	50-50		48	Var	T	5	Var	Var	Var	Var	1	48x3½	Var
2-20	50000		2850	11.00/20	50-50		48	Var	T	5	Var	Var	Var	Var	1	48x3½	Var
2-20	50000		2850	11.00/22	50-50		48	Var	T	5	Var	Var	Var	Var	1	48x3½	Var
SUPER LOAD BOOSTER																	
LB34	34000				50-50		48	Var	Var	Var	Var	Var	Var	Var	2	48x3½	Var
TANDEM TRAC																	
F-TT (All makes)	36000		1130**	11.00/22	50-50		50	Var	Var	Var	MA or VA	CA	Var	Var	2	(y)	Var
TRUCKTOR																	
T-16 (Single)	18000			11.00/20				Tim	T	5	MA	CA	16½x7	512	4	56	
T-20 (Single)	20000			12.00/22				Tim	T	5½	MA	CA	1847	450	4	56	
T-25 (Single)	25000			12.00/24				Own Tim	SR-T	6	MA	CA	1847	450	4	56	
TT-16 (Tandem)	32000			10.00/20	50-50		50	Tim	T	5	MA	CA	16½x8	438	6	45½	
TT-18 (Tandem)	36000			11.00/20	50-50		50	Tim	T	5	MA	CA	16½x8	438	6	45½	
TT-16 (Tandem air suspension)	32000			10.00/20	50-50		50	Tim	T	5	MA	CA	16½x8	438	General Air Spring		
TT-18 (Tandem air suspension)	36000			11.00/20	50-50		50	Tim	T	5	MA	CA	16½x8	438	General Air Spring		
TT-18 (Tandem spread axle)	36000		3550	11.00/20	50-50		108½	Tim	T	5	MA	CA	16½x8	438	General Air Spring		

For Footnotes, See Page 246

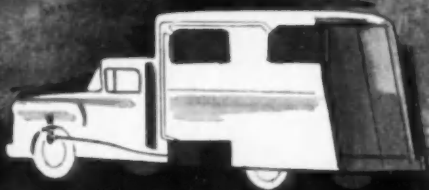
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For top value in plate refrigeration, investigate KOLD-HOLD plates for your trucks... as straight "Hold-Over" plates or as lo-sides with MARK and CROWN continuous truck refrigeration systems.

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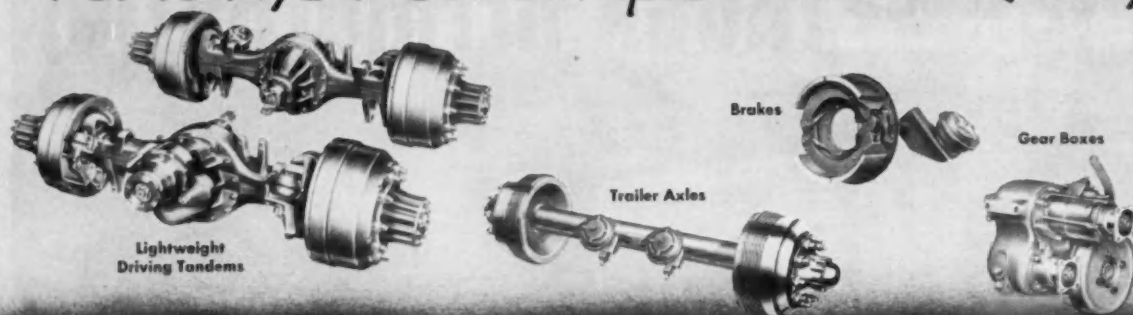
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Timken-Detroit offers you a full line of torture-tested axles and brakes, both
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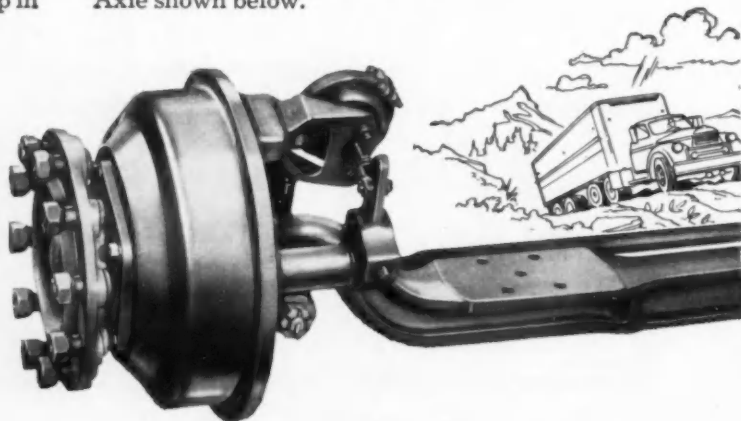
As a prime supplier to this nation's automotive industry for nearly 50 years—Timken-Detroit has learned the exacting needs of the trucking industry. The result: TDA® Axles and Brakes mean leadership in

quality, service, safety and dependability.

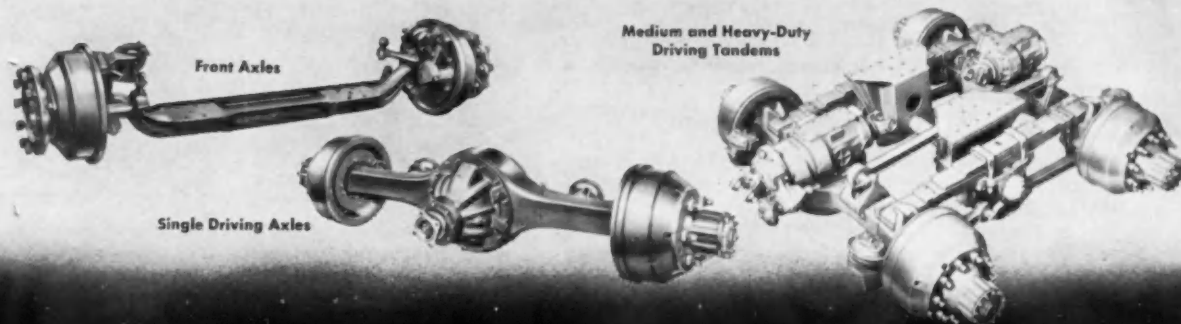
Today we are manufacturing the industry's most complete line of front axles . . . ranging in capacity from light commercial vehicles to the heaviest off-highway applications.

An example of the engineering features and superior quality built into every Timken-Detroit product is the F-900 Front Axle shown below.

Plants at: Detroit, Michigan
Oshkosh, Wisconsin • Kenton and Newark, Ohio
New Castle, Pennsylvania



Axles and Brakes for Commercial Vehicles

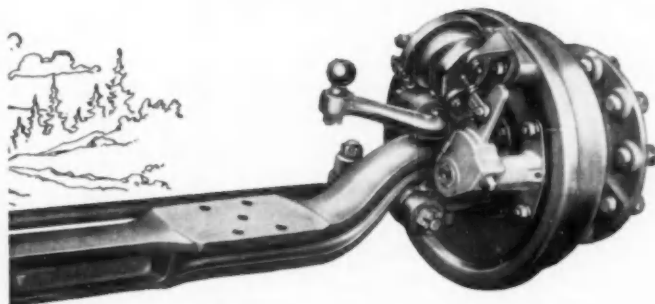


Products of Rockwell Spring and Axle Co.

TIMKEN-DETROIT FRONT AXLES OFFER YOU GREATER STABILITY, SAFETY AND SERVICE!

You get better vehicle performance—under all conditions—with the F-900 Series Front Axles. Superior Timken-Detroit design and construction features give you front end stability—maximum strength and balance.

These improved Front Axles reduce driver fatigue . . . make steering easier . . . hold the driving path better . . . offer greater maneuverability . . . and contribute to increased vehicle life and superior performance.



Forged Axle Centers of high carbon steel are specially hardened for greater strength. The unique "Equalized-I" design between the spring pads provides uniform resistance to both horizontal and vertical forces.

Forged Knuckles of Alloy Steel are hardened for best metallurgical characteristics . . . are of improved design with large size spindles. A generous fillet where the spindle joins the knuckle body gives additional stiffness. These design features along with shot peening assure utmost strength.

Forged Steering and Tie Rod Arms are also of alloy steel and hardened. Stub arm design with carefully proportioned sections give these arms extra stamina and rigidity.

True Sphere Ball Studs in steering and tie rod arms have generous radii for maximum strength, and are induction hardened for long wear.

©1957, RS&A Company

WORLD'S LARGEST MANUFACTURER OF AXLES FOR TRUCKS, BUSES AND TRAILERS

SPARK PLUG HEAT RANGE

CORRECT spark plug choice is necessary for efficient engine operation. One important factor to consider is proper spark plug heat range.

If the plugs are too cold for your engines, they may carbon-up and become deposited with soot.

If you're using plugs that are too hot, they may become coated with oxide to the point where performance is sharply out.

Heat range of a spark plug is mainly determined by the length of the insulator, is usually identified by the number on the porcelain top of the plug.

The chart shows how manufacturers rank their various



size plugs by heat range. However, only comparative heat range relationship is shown. Since spark plugs from different makers vary as to grouped ranges, direct comparison among makes is not always possible.

Thread Size Reach and Hex Size	HEAT RANGE	AC			Auto-Lite		Blue Crown	Hastings
		Automotive	Commercial	Champion	Standard and Transport	Resistor		
10 mm 3/8 in. 5/8 in. Hex	HOT ↑ ↓ COLD	M-8 M-8 104	..... ..... 104 Com 103 Com	Y-8 Y-8 Y-4A	P-6 P-6 P-4	PR-6 PR-6 PR-4	T-8 T-8 T-8 T-8	10-170 10-230 10-300
14 mm 1/2 in. 1 1/8 in. Hex	HOT ↑ ↓ COLD	47XL 46XL 45XL, 45XLR R-44XL	..... ..... CR-45XL 44XL Com, 44XLR Com	N-18 N-8, N-8B, XN-8 N-5, NA-8 N-3, NA-10	AG-7 AG-5, AG-82*, AE-10 AG-3	4GS-125, 4GS-150, AGR-82* AGR-51, 4GS-175, AGR-82* 4GS-206, AGR-41, AGR-32*	MT-14 MT-13 MT-12 MT-12	14-150L
14 mm 3/8 in. 1 1/8 in. Hex	NORM. ↑ ↓ COLD	R-45XLS R-44XLS	..... .....	N-16Y† N-12Y†	..... .....	AGR-52* AGR-42*	MT-12	..........
14 mm 3/8 in. 1 1/8 in. Hex	HOT ↑ ↓ COLD	45F 44F	..... .....	L-14, L-8 L-10 L-7, L-10S L-5, L-11S	AE-6, AE-82* AE-4	AER-6 AER-4	MH-16 MH-16 MH-14	...............
14 mm 1/2 in. 1 1/8 in.	HOT ↑ ↓ COLD	47L 48L 45L, 45LS 43L 43L	45L Com 46L Com 43L Com 43L Com	H-12 H-11 H-10, H-18Y H-9 H-8	AL-11 AL-9 AL-7, ATL-8, AL-82* AL-5, ATL-4 AL-5	ARL-8 ARL-8 ARL-82 ARL-5 ARL-5	M-8L M-8L, M-SLX* M-8L M-8L, M-6LX* M-6L	.........................
14 mm 3/8 in. 1 1/8 in. Hex	HOT ↑ ↓ COLD	46S, R-46S 45S, R-45S 44S, R-44S 42S, R-42S	..... ..... ..... .....	J-18Y† J-12Y†	..... .....	AR-82* AR-82* AR-42* AR-32*	M-5, M-5P* M-3	..........
14 mm 3/8 in.	HOT ↑ ↓ COLD	46, 48X 46, R-46 45, R-45 44, R-44 43, R-43	..... 47 Com 46 Com 45 Com 44 Com 43 Com, C-43, CR-43 42-5 Com C-42-4 42 42	J-14 J-12 J-11 J-8 J-7 J-6 J-5 J-2	A-11, AT-10 A-11, AT-10 A-9, AT-8 A-7, AT-8 A-5, AT-6 AT-4 A-3	AR-10 AR-10 AR-8, 4S140, AR-80 AR-8, 4S140, AR-80 AR-8, 4S166, AR-51 AR-4, AR-41 4S250	M-11 M-9, M-8X* M-7 M-5, M-5X* M-5 M-3, M-3X* M-3	14-105 14-125 14-140 14-165 14-190 14-225 14-300
18 mm Tapered Seat	HOT ↑ ↓ COLD	86T, 86TS 85T, R-85T 85TS, R-85TS 84T	..... ..... ..... 84T Com C-83T	870, F-14Y† 860, F-11Y† F-10	BF-7, BF-82* BTF-6, BF-42* BTF-3	BRF-8, BRF-82* BRF-82 BRF-42	E-9 E-9P* E-4 E-4	18-150T 18-170T 18-170T
18 mm 3/8 in. 1 1/8 in.	HOT ↑ ↓ COLD	..... 88 88	88L Com, C-88L 87S Com 86S Com 86 Com, 86S Com C-86 88S Com 85 Com, 85R Com 83 Com, 83S Com 83 Com, 83S Com, CR-83 82 Com, 82S Com 81S Com	10 Com D-21 D-16 8 Com 7 6 Com D-10 5 Com 4 Com	BT-10 BT-9 BT-8 BT-8 BT-8 BT-6 BT-4 BT-3	BR-10 BR-10 BR-8 BR-8 BR-8 BR-4	87 87 87 88 88 84 84 83 83 83	18-105 18-125 18-135 18-155 18-220 18-320
3/8 in.-18 3/8 in. 1 1/8 in. Hex	HOT ↑ ↓ COLD	78 78S 76 74	78L Com, C78L 78L Com, C78L 77 Com 75 Com 73 Com	3 Com 2 Com L 20 C-4 1 Com 0 Com	TT-10 TT-8 TT-8 TT-4	..... ..... ..... .....	78 78 78 75 74 74	1/8-108 1/8-135 1/8-158 1/8-220 1/8-320
1/2" Pipe 1 1/8" Hex	.....	26 26	..... .....	A-25 30	F-11 F-11	..... .....	TF TF	..........

*—Power tip plugs, for overhead valve engines only.

†—Projected Core nose types.

*—Special gap for two-cycle engines.

"I LEARNED A LOT FROM 75 MILLION MILES

... that's why I use Fords 100% in my Railroad Transfer Service fleet,"
says Mr. J. L. Keeshin, President Railroad Transfer Service, Inc.



"My experience through 43 years and millions of miles of truck fleet operation from coast to coast has emphasized the fact that Ford is unmatched for all the qualities most important to fleet owners—dependability, low running costs, get-up-and-go, good solid value. That's why I switched 100% to Fords when I took over the Railroad Transfer Service in 1956.

"We now operate 65 Ford passenger vehicles and 14 truck tractors. Most of this equipment runs 21 hours per day, 7 days a week, 52 weeks of the year, clocking nearly three quarters of a million miles annually. Absolute dependability is a must. Vehicles are operated for 30 months without major overhaul and only replaced to capitalize on Ford styling and engineering advances. We overlook *nothing* that will help us in maintaining a profitable fleet operation—in equipment, Fords have what it takes!"



Central Station, Chicago, Illinois

FORD FLEET "STAYING" POWER IS PAYING POWER

When fleet owners get the facts they go Ford. There's value you can bank on to begin with; low running costs, less downtime as the miles roll by. Only Ford cars offer the economy of short-stroke Six and Thunderbird V-8 engines. Compared to its nearest competitor, the 58 Ford is the most durably built... best weatherproofed and insulated

... has the highest quality upholsteries... the only double-sealed brakes and a real payload of other features that put Ford first in line for economy, durability and all-round value. These are only a few of the reasons why Fords are preferred for fleet use. Your nearest Ford Dealer can prove it! See him soon... this is only the beginning of the story.

Dependability is the byword of **58 FORD FLEETS**

PROVED AND APPROVED AROUND THE WORLD



ZENITH
CARBURETORS

ALL THAT THE NAME IMPLIES—
AT THE TOP—IN DESIGN AND IN DEPENDABILITY

We wish that we could guarantee you trouble-free carburetion under all operating conditions. We can, however, definitely assure you of the next best thing. With Zenith* Carburetors, your service requirements are fewer, carburetor life is longer and you will get far more reliable fuel control.

It will pay you to look for Zenith Carburetors

on the new vehicles you buy. And when you overhaul, remember your local Zenith distributor can help a lot in supplying the right carburetor for every type of engine, no matter what size horsepower or design. **It is a fact—Zenith actually has more experience in more fields with more engine types than any other manufacturer.**

*REG. U. S. PAT. OFF.

Zenith Carburetor Division

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Export Sales: Bendix International, 205 E. 42nd St., New York 17, N. Y.



We're Selling Profits

Through Modern, High-Capacity Trailer Design!



This extra 5,000 pounds of Lilly medicinals is handled by one of Security Cartage's 40-foot Fruehauf Volume★Vans



A 40' corrugated steel Fruehauf Volume★Van operated by Security Cartage Company of Fort Wayne, Indiana, leaves the loading dock of an Eli Lilly and Company plant in Indianapolis.

Trailer-loads of Polio Vaccine and other Eli Lilly Company medicinal products are up to 5,000 pounds larger now, since the introduction of 40-foot Fruehauf Volume★Vans into Lilly's shipping operation by Security Cartage. Both shipper and carrier benefit by this 14.3% payload increase.

The advanced shipping methods illustrated so factually here are representative of a significant transportation revolution that is gradually occurring on all the nation's shipping docks. Ten years ago, the 32-foot Trailer was a national standard. Three years ago, 35-foot Volume★Vans, with which Security has also moved many Lilly products, were pioneered by Fruehauf and used by progressive carriers for greater shipping efficiency. Payloads jumped 35% on the average. Now the trend to the 40-foot Volume★Van is growing—another step toward the highest level of freight efficiency in the history of American industry.

All the benefits that this trend brings are available now to you through Fruehauf Volume★Vans.



For Forty-Four Years — More Fruehauf Trailers on the Road Than Any Other Make!

COMMERCIAL CAR JOURNAL, April, 1958

World's Largest Builder of Truck-Trailers

FRUEHAUF TRAILER COMPANY

10940 Harper Avenue • Detroit 32, Michigan

PLEASE SEND FREE LITERATURE ON EXTRA SHIPPING PROFITS POSSIBLE WITH VOLUME★VANS!

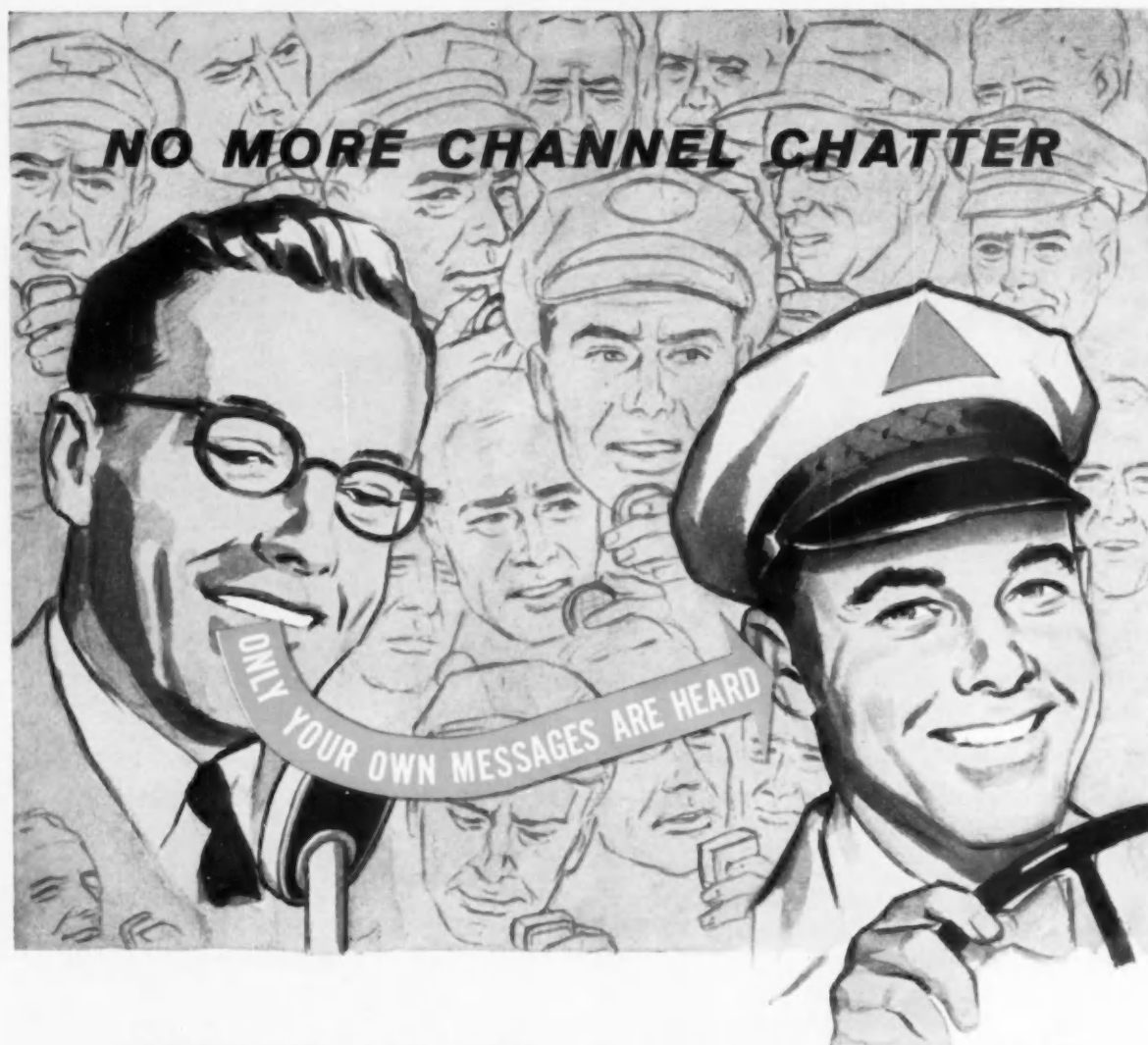
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NO MORE CHANNEL CHATTER

Motorola Private-Line radio...the new kind of 2-way radio

This new concept in 2-way radio communications has been best described by satisfied users... "It's almost as if we had the channel all to ourselves. We only hear our own messages."

Motorola Private-Line radio is completely quiet except when receiving messages from your own dispatcher. Channel Chatter is gone. Drivers no longer have to listen to the constant stream of messages from other radio users on the same channel. Missed and misunderstood messages are virtually eliminated...overall efficiency is increased.

And now new Private-Line radio with *Dual Squelch* makes the changeover easy for those already equipped with Motorola radio. During the transition period, your messages can be received by both present equipment and Dual Squelch Private-Line radio.

New system or old, get the full story on Motorola Dual Squelch Private-Line radio. Call your Motorola communications specialist or write for detailed brochure and case history of how a company like yours can increase profits with Motorola radio.



MOTOROLA PRIVATE-LINE 2-WAY RADIO

Motorola Communications & Electronics Inc., A Subsidiary of Motorola Inc., 4501 Augusta Blvd., Chicago 51, Illinois

SECTION TRAINING

5

Manuals for Maintenance Training 265

Well-trained mechanics do a better job in less time. One way to have them in your shop is to provide them with good maintenance manuals—such as the items described in this up-to-date list

Maintenance Films for Mechanic Training 300

Another way to get the lower cost and better work resulting from having well trained mechanics is to show them how it's done. Do it by actual demonstration—or use the films listed here

Safety Films for Truck and Bus Fleets 328

Show these films to your drivers, your shop men, your freight handlers. Fleet experience proves the fact that savings result from safe operation. Set up a schedule now, cut your costs.

Truck and Bus Public Relations Films 350

Reasonable taxes and fair regulation are easier to get when the public knows the facts about the nation's truck and bus fleets. A good way to tell them is to show one of these selected films

8106B Trutest Special Gauge checks all other gauges

7188BH All-Purpose Service Gauge for all service needs

#895 1/4" TUBELESS TIRE COMPRESSION RIVET UNIT (Including 2-oz. Co.)

Schrader Tubeless Tire Compression Rivets

#335 "FIX FLATS" PATCH UNIT Contains: Approx. 55 Patches Size: 1 1/2" x 2 1/2"

Schrader Self-Vulcanizing Patches

Service package of 100 Schrader Caps

Service package of 100 Schrader Cores

Best fleet shop practice calls for GENUINE SCHRADER TIRE SERVICE PRODUCTS

Vehicles perform better, tire service is simplified with quick, reliable Schrader products like these:

- 1 **Genuine Schrader Tire Valves, Sealing Caps and Cores** are the basic items you need to seal air in the tires. Convenient service packages should always be in stock.
- 2 **Genuine Schrader Gauges** let you catch flats in the shop—when you record your daily air pressures.
- 3 **Seal tubeless tire punctures three ways tight** with Schrader's new Compression Rivets: inside the tire, inside the hole, and outside the tire. Easy, quick and permanent. Nail holes up to 1/4".
- 4 **Get a real cured-on patch with new chemical cold patch**—Schrader's new "Fix Flats" Patches and Self-Vulcanizing Fluid for tube or tubeless. Various sizes available.

Your supplier has all these Schrader products plus the finest tools and air equipment to make your shop practices most effective.

A. SCHRADER'S SON • BROOKLYN 38, N. Y.
Division of Scovill Manufacturing Co., Inc.

Schrader
a division of SCOVILL

FIRST NAME IN TIRE VALVES
FOR ORIGINAL EQUIPMENT AND REPLACEMENT

Manuals for Maintenance Training

A WELL TRAINED mechanic does a better job in less time. One way to have well trained mechanics is to provide them with good maintenance literature.

The following pages contain brief descriptions of manuals, folders, charts and booklets on a variety of specific subjects. Many are provided free of charge. Some of the more complete publications are available at a nominal charge. Addresses of the manufacturers offering them are given here for your convenience in ordering.

Effort has been made to select a broad enough listing so you'll be able to choose manuals to fit your fleet operation. A word of warning, however. In a few cases, old stand-bys are in limited supply or no longer available. You may have to borrow them from a neighboring fleetman.

The list is arranged under the following headings to speed your finding specific information quickly:

Subject	Begins on page
Axles, Springs, Wheels	265
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Clutches, Transmissions	268
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Electrical, Ignition	272
Engines	280
Fuels, Lubricants	286
Tires	290
Tubeless Tires	292
Tools & Procedures	296
Welding Techniques	298

Axles, Springs and Wheels

Eaton Handbooks—Various bulletins describing service and maintenance procedure on Eaton two-speed axles, two-speed axles with electric shift controls, Model No. 36M tandem-drive axles, electric shift for Timken two-speed axles. Requests should indicate information desired and model number of unit. Free—Sales Promotion Manager, Axle Division, Eaton Mfg. Co., Cleveland 10, Ohio.

Serviceman's Guide, Causes and Prevention of Axle Shaft Failures—Tells how to avoid axle "weariness failures" and how to spot trouble before it starts. Free—U. S. Axle Co., Inc., Water St., Pottstown, Pa.

Timken-Detroit Field Service Bulletins—Various bulletins describing assembly, maintenance, lubrication, brake service, etc., on Timken-Detroit

axles. Requests should include information desired and model number of unit. Free—Technical Publications Manager, Service Engineering Dept., Timken-Detroit Axle Division, Rockwell Spring and Axle Co., Detroit 32, Mich.

Timken-Detroit Wall Chart—Illustrates and describes adjustment and assembly of Timken-Detroit hypoid helical two-speed, double-reduction drive units. Free—address as above.

Tips on Spring Service and Inspection—29 pages—Covers leaf spring technical data briefly, including construction, lubrication, adjustment and maintenance. Each 25c.—Leaf Spring Institute, 1220 Keith Bldg., Cleveland 15, Ohio.

Trucktor General Air Spring Tandem Service Instructions, No. 4—5 pages—Covers maintenance, operation and lubrication of the Trucktor General Air Spring tandem axle. Free—Sales Dept., The Trucktor Corp., 1137 Route 22, Mountainside, N. J.

Truck Rim Identification and Operating Manual—39 pages—Illustrates and describes various types of truck wheel rims and dual wheel construction. Includes tire mounting and demounting instructions with a special section on rim accidents. Free—from members of the National Wheel and Rim Assn. For name of closest member, write the association at 208 West St. Clair Ave., Cleveland 13, Ohio.

Wheel and Steering Alignment Technical Manual—Manual covering complete data on wheel and steering alignment. Each \$2.00—John Bean Division, Food Machinery & Chemical Corp., 1305 Cedar St., Lansing 4, Mich.

Bean Wheel Alignment Specifications—Charts giving wheel alignment specifications. Include model number of vehicle when requesting information. Free—address as above.

Principles of Wheel Alignment—53 pages—Thorough coverage with many diagrams of wheel alignment, including caster, camber, toe-in, king pin inclination, steering troubles, wheel balance, rear wheel and drag link alignment. Each \$1.00—Bear Mfg. Co., Rock Island, Ill.

The Automotive Chassis—616 pages—By P. M. Heldt, this book covers the frame, axles, suspension and steering, including both passenger car and truck. Each \$9.00—Chilton Co., Book Division, 56th and Chestnut Sts., Philadelphia 39, Pa.

Brakes

Brakes and How They Work—72 pages—Comprehensive text on basic brake operation. In addition to elements of brake operation, it covers fundamentals of mechanical, hydraulic, air and vacuum systems. One of the best available. Free—Advertising Dept., American Brakeblok Division, American Brake Shoe Co., 4600 Merritt Ave., Detroit 9, Mich.

Quick Reference Brake Service Guide—68 pages—In handy size, a manual that covers adjustment of all major brake types plus a host of service tips. Free—address as above.

Air Brake Wall Chart—Gives ICC recommended tests for air pressure drop. Free—Berg Mfg. & Sales Co., 1712 South Michigan Blvd., Chicago 16, Ill.

Air Brakes, Operation and Maintenance, No. 5057—Wall chart with comprehensive operation, maintenance and trouble shooting data on air brakes. Fully illustrated. Free—Sales Promotion Dept., Bendix-Westinghouse Automotive Air Brake Co., Elyria, Ohio.

Fundamentals of Brakes, Compressed Air and Compressed Air Brakes, No. 5060A—12 pages—Well illustrated and easily understood description of air brake operation. Free—address as above.

Delco Brake Service Manual—Covers brake service, maintenance and care of Delco brakes. Free—United Motors System, Division of General Motors Corp., 3044 West Grand Blvd., Detroit 2, Mich.

Moraine Products Power Brake Units Service Manual, Bulletin No. 17D4—30 pages—Carefully illustrated manual on Moraine power brake equipment. Each 50c.—address as above.

Engineering Brake Adjustment Chart—Chart on making brake adjustments. Free—Gatke Corp., 228 North LaSalle St., Chicago 1, Ill.

Grey-Rock Brake Service Manual—56 pages—Description of parts and (TURN TO NEXT PAGE, PLEASE)

Maintenance Manuals

Continued from Page 265

operation of major brake systems and makes. Includes assembly, service and maintenance procedures for brakes and related components. Each \$2.50—Advertising Dept., Grey Rock Division, Raybestos-Manhattan, Inc., Manheim, Pa.

More for Your Dollar in Longer

Brake Block and Drum Life—Brief manual listing nine ways to extend brake service life. Free—Grizzly Mfg. Division, 700 West Caroline St., Paulding, Ohio.

Johns-Manville Brake Reliner's Manual—90 pages—Description of parts and operation of major brake systems and makes designed for passenger car and light truck fleets. Includes assembly, service and maintenance procedures for brakes and related components. Free—Friction Materials Dept., Industrial Products

Division, Johns-Manville Sales Corp., 1617 Pennsylvania Blvd., Philadelphia 3, Pa.

Johns-Manville Fleet Reliners Manual—80 pages—Training manual for operation, inspection and maintenance of bus, truck and trailer brake and brake control systems especially designed for fleet use. Free—address as above.

Raybestos Brake Service Guide for Fleets—43 pages—Comprehensive, well illustrated manual on brake service on all type brakes. Has a special section on air system maintenance. Free—Advertising Dept., Raybestos Division, Raybestos-Manhattan, Inc., Bridgeport 2, Conn.

Fleet Trouble-Shooting Brake Chart for Vehicles with Air Brakes—Wall chart with a complete outline of where to look for the cause of trouble. Free—address as above.

Modern Brakes—27 pages—Description of parts and operation of major brake systems and makes. Includes service, maintenance and trouble shooting data for brakes and related components. Free—The Russell Mfg. Co., Middletown, Conn.

Brake Adjustment Recommendations—Large size wall chart with diagrams and instructions for minor and major adjustment on principal type brakes. Free—address as above.

Thermoid Brake Service Reference Book—Description of parts and operation of major brake systems and makes. Includes assembly, service and maintenance procedures for brakes and related components. Free—Automotive Replacement Division, Thermoid Co., Trenton, N. J.

Wagner Hydraulic Brake Service Guide, No. HU-411—8 pages—Presents an outline for use in hydraulic brake service and repair, including a trouble shooting guide. Free—Sales Promotion Manager, Wagner Electric Corp., Automotive Division, 6400 Plymouth Ave., St. Louis 14, Mo.

Warner Electric Brake Service Manual, No. 3203—64 pages—Complete description of operation, maintenance, installation of Warner electric brake system. Fully illustrated to aid in assembly and trouble shooting. Free—Automotive Division, Warner Electric Brake and Clutch Co., Beloit, Wis.

(TURN TO PAGE 268, PLEASE)

HEAVY-DUTY REFRIGERATION UNIT

POWER



Thermo King built
by Thermo King Corp.,
Minneapolis, Minn.

Refrigeration Unit
by Tru Kooler, Inc.,
Oelwein, Iowa.

backed
by

2000

SERVICE STATIONS

• These refrigeration units have a dependable power source . . . Wisconsin Heavy-Duty Air-Cooled Engines.

A thermostat controls engine speed *automatically*. As refrigeration temperature rises, engine speeds up. When desired temperature is reached, engine "idles." The cycle is repeated again and again.

And backing up Wisconsin Engines are 2,000 service stations . . . several in your area.

Write for bulletin S-198, pinpointing the location of service stations and distributors. Tell us how many copies you need.



WISCONSIN MOTOR Corporation

MILWAUKEE 46, WISCONSIN

World's Largest Builder of Heavy-Duty Air-Cooled Engines



"Gates TANDEMATIC DRIVE doubles the traction ...lengthens tire life"



Walter Beil of Charles Beil & Sons, Millstadt, Illinois, writes: "We were experiencing poor tire wear, and needed better traction on our coal carriers. We decided to try Gates Tandematic Drives on two of our fifteen units.

"The drive has accomplished everything Gates said it would. We get twice as much traction, better mileage and even wear on all tires. Road shock and wheel hop have been practically eliminated, and our drivers sure appreciate the safety of more positive braking power.

"Our other units are now being equipped with Gates Tandematic Drives."

● Driving dead axle provides these additional advantages for economical and efficient performance.

- * Uniform power through all 8 wheels
- * Improved steering — easier, smoother ride — less driver fatigue
- * Smoother power for less road shock and jerking — reducing maintenance

For complete information on Gates Tandematic Drive write to:

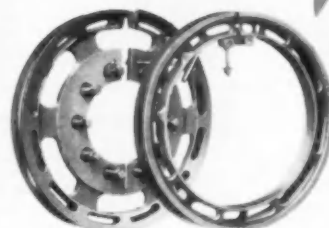
Manager — Tandematic Department

The Gates Rubber Company Sales Division, Inc.
999 South Broadway, Denver 17, Colorado



TPA 281

Gates Tandematic Drive gives you both...



Disc Type Spoke Type

Specially hardened Red Groove Pulley

has more than 3 times greater life than ordinary pulleys.

Roll-on feature (Pat. Pend) Split construction permits pulley groove to be offset, so belt can be rolled on at high tension easily and safely without damaging the belt.

Self-cleaning. Open design insures peak operating efficiency at all times.

Rib-Top V-Belt



Protective ribbed top: Resists sandblast effects from wheels — gives longer belt life.

Flex-Weave Cover: (U. S. Pat. No. 2519590) Protects vital core of belt from mud, dirt, grease and oil; yet gives greater flexibility for longer service life.

Concave Sidewalls: (U. S. Pat. No. 1813698) Concave sides increase belt life. As belt bends, concave sidewalls become straight, making uniform contact with sheave groove. Uniform contact means less wear on sides of belt ... far longer belt life.

Special tensile cord construction: Greater resilience of Gates tougher tensile cords enables belt to absorb shocks and carry extra heavy loads. Also permits belt to be pre-loaded to the proper operating tension while being installed.

Gates Tandematic Drive

Maintenance Manuals

Continued from Page 266

Clutches and Transmissions

The Clutch, How to Service It—50 pages—Manual on clutch maintenance, including clutch operation, construction, how to do a clutch job, pedal adjustment, how to locate and correct clutch troubles. Each 50¢—Sales Ser-

vice Dept., Accurate Parts Mfg. Co., 1600 South Ashland Ave., Chicago 8, Ill., or local jobber.

Service Manuals—Manual on servicing DP, ML, TC clutches. Specify model number when ordering. Free—Advertising Dept., Lipe-Rollway Corp., 806 Emerson Ave., Syracuse 1, N. Y.

Clutch Troubles and Their Cures—11 pages—Trouble-shooting guide for correction of clutch troubles. Includes

assembly and inspection tips. Free—Russell Mfg. Co., East Main St., Middletown, Conn.

Torque Converters or Transmissions—496 pages—Complete volume discussing features of both torque converters and transmissions by P. M. Heldt. There's a heavy emphasis on automotive application. Each \$8.00—Chilton Co., Book Division, 56th and Chestnut Sts., Philadelphia 39, Pa.

Service Manuals, Fuller Transmissions—Available for Model Nos. 5A33, 5A330, R35, R46, R96, R960 and R1150. Specify model number when ordering. Free—Service Sales, Fuller Mfg. Co., Transmission Division, Kalamazoo, Mich.

Preventive Maintenance Wall Chart for Conventional 5-Speed Transmissions—Developed especially for truck operators, wall chart covers all checks on Fuller's 5-speed unit. Free—address as above.

Maintenance of Heavy Duty Truck Transmissions, Form No. 102—24 pages—Illustrated discussion of the general aspects of heavy duty truck transmission maintenance. Free—address as above.

Automatic Transmissions, Vol. III, Thompson Repair and Tune-Up Manuals—Full description of operation, service and maintenance of automatic transmissions. Each \$1.50—Service Division, Thompson Products, Inc., 2209 Ashland Rd., Cleveland 3, Ohio.

The Hydra-Matic, 1939 Thru 1956—This issue of Lubrication for February 1956 gives a detailed look at the Hydra-Matic transmission including the Twin Hydra-Matic for heavy trucks—Free—The Texas Co., Advertising Division, Sales Dept., 135 East 42nd St., New York 17, N. Y.

Hydra-Matic Transmission Service Manual—256 pages—Complete step-by-step presentation with over 600 illustrations covering Hydra-Matic transmission service. Each \$4.50—The Paul-Marsh Co., 520 West Fort St., Detroit 26, Mich.

AFBDA Bearing Maintenance Reports—Folders covering various aspects of ball and roller bearing maintenance. When requesting, specify information desired. Free—The Anti-Friction Bearing Distributors Assn., 1900 Euclid Ave., Cleveland 15, Ohio.
(TURN TO PAGE 270, PLEASE)

Another *rmc* Valve Exclusive



SOLID STEM REPLACEMENTS for SODIUM FILLED VALVES

Maximum performance at a lower price...

Minimize your valve troubles with RMC Bi-Metal, Stellite Faced, Solid Stem Replacements for Sodium Filled valves. Designed and built to outlast

and outperform; these "fleet tested" Valves require no special installation ... cost less, too. They're worth a try.

Having burning troubles? Try *rmc* "Heat Banded" Valves

Band of "Non-burning" Alloy fused around the top outer edge of valve, and Stellite face, cuts valve burning

to a minimum. Available for required applications in solid stem replacements and standard valves.

"NON-BURNING" HEAT BANDS
Around Top edge of Valve (where required) cuts Valve burning to a minimum.



STEM DIAMETERS THE SAME
—as sodium filled Valves—Need no special guides or installation.

STELLITE FACES
Longer Wear—better Seating under toughest operating conditions.



TWO PIECE (Bi-Metal) CONSTRUCTION
Special Austenitic high heat heads to take the "Gaff" Special stems—easy on the guides, fast heat dissipation.



ROTO-CAP OR ROTO ASSEMBLY TIPS
Available both types. Tips are hardened for longer Wear.





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Roto Kits



Valve Springs
and Locks



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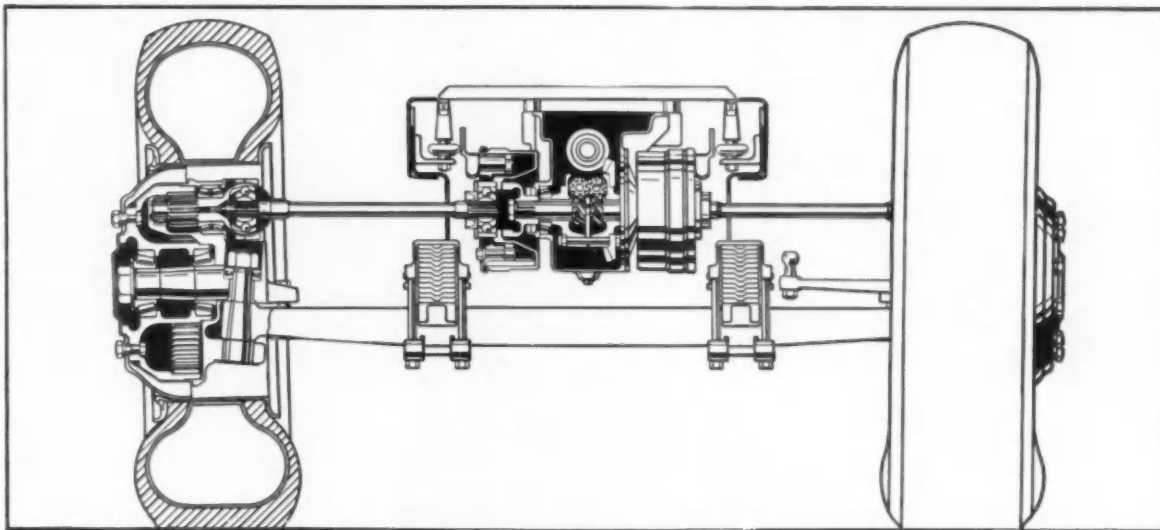
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The Walter Suspended Double Reduction Drive provides the first reduction by spiral bevel gears, forming a unit with the front and rear differentials and brakes which are suspended in the frame instead of being mounted in or on the axle or load-carrying member; and the second or final reduction by means of enclosed pinions and large internal gears mounted directly in each of the four wheel hubs, the power being transmitted by double universal cross shafts from the differentials to the wheel drive pinions.

These wheel gears provide a reduction of 6, 5 or 4 to 1, according to the capacity of the model, so that the drive shafts and other drive parts, including the differentials, operate at a very much lower stress than obtains with the ordinary axle types which require the full wheel torque to be

transmitted by the differential and drive shafts. The large diameter internal gears located in the wheel hubs, do not reduce the ground clearance of the axle between the wheels, where the lowest part is the dead axle or load-carrying member, which has very high ground clearance. All driving parts are protected from damage by rocks or other obstructions.

The double Universals eliminate all bending and fatiguing strains on the drive shafts, or cramping of drive bearings or gears, due to misalignment or deflection of the load-carrying member, so that maximum efficiency and wear life is assured under all operating conditions.

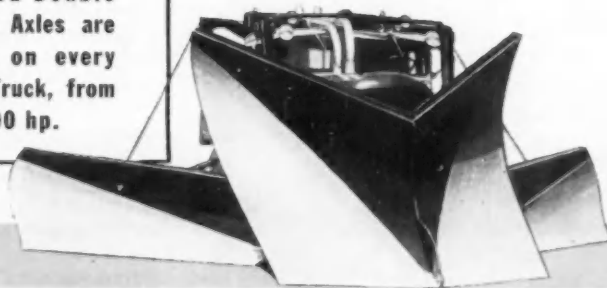
Unsprung weight is greatly reduced, because a substantial portion of the drive mechanism is carried and suspended in

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The relative position of the steering pivot, drive gears and wheel center is such that all forces and drive reactions are properly balanced resulting in minimum strain on the cross tie rod and less effort is required to steer the front driving wheels which give positive control of direction.

Suspended Double Reduction Axles are Standard on every WALTER Truck, from 125 to 300 hp.



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WALTER
4-POINT POSITIVE DRIVE
SNOW FIGHTERS®

Maintenance Manuals

Continued from Page 268

Bearing Maintenance Handbook—Describes proper care and maintenance of bearings. Free—Advertising Dept., Hyatt Bearings Division, General Motors Corp., Harrison, N. J.

How to Service Ball Bearings in Automotive Equipment—Covers ser-

vice procedure for ball bearings. Free—Advertising Dept., M-R-C Bearings Service Co., Jamestown, N. Y.

Service Procedure for Ball Bearings, No. ND-A57—12 pages—Fully illustrated procedures on servicing and care of ball bearings. Free—New Departure Division, General Motors Corp., Bristol, Conn.

Bearing Failures and Their Causes—16 pages—Fully illustrated troubleshooting guide for correction of ball

and roller bearing troubles. Free—SKF Industries, Inc., Front St. and Erie Ave., P. O. Box No. 6731, Philadelphia 32, Pa.

How to Install and Care for Bearings, Form No. 308-75S—Wall chart illustrating basic steps in proper handling of ball and roller bearings. Free—address as above.

Timken Tapered Roller Bearings, Their Care and Maintenance—Procedures for care and maintenance of Timken tapered roller bearings. Free—Advertising Dept., The Timken Roller Bearing Co., Canton 6, Ohio.

Anti-Friction Bearings—Manual on care and maintenance of various anti-friction bearings. Free—address as above.

Cooling Systems

Give the Cooling System a Chance, Service Bulletin No. 19—12 pages—Data on need for cooling system maintenance and troubles to look for. Emphasizing diesel engines, the bulletin is also valuable for other type engines. Free—Cummins Engine Co., 5th and Wilson Sts., Columbus, Ohio.

Serviceman's Manual on the Automotive Cooling System—41 pages—Covers cooling system operation, selection of coolant, chemical and mechanical cleaning of the cooling system, preparation for summer or winter driving, and a large troubleshooting guide. Each \$2.00—Advertising Dept., E. I. du Pont de Nemours & Co., Inc., 2494 Nemours Bldg., Wilmington 98, Del.

Radiator Water Flow Charts—Radiator water flow charts in gallons per minute. Specify truck make and year when ordering. Free—Equipment Division, Inland Mfg. Co., 1108 Jackson St., Omaha 2, Nebr.

What Every Service Man Should Know About Automotive Cooling Systems—40 pages—Manual on complete servicing of automotive cooling systems. Free—Automotive Engineering Dept., National Carbon Co., Division of Union Carbide & Carbon Corp., 30 East 42nd St., New York 17, N. Y.

Automotive Cooling System, No. AFP-1368-A or No. AFP-1512 (for V-8 engines)—Wall chart covers automotive cooling system with complete schematic diagrams. Free—address as above.

(TURN TO PAGE 272, PLEASE)

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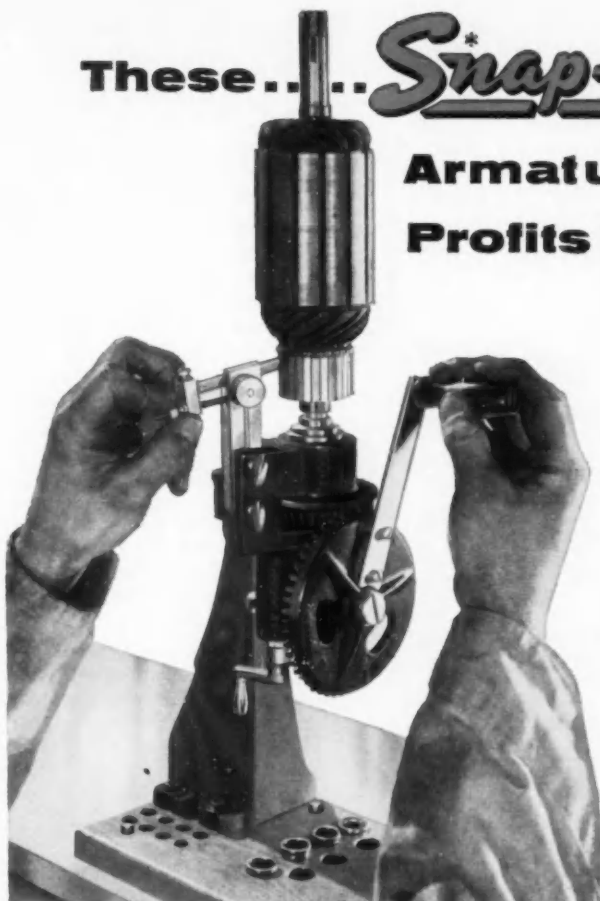
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Maintenance Manuals

Continued from Page 270

Maintenance of Automotive Cooling Systems—Textbook on construction, function and operation of automotive vehicle cooling systems. Maintenance instructions and trouble shooting tips for mechanics. \$1.50 to members, \$3.00 to non-members — Society of Automotive Engineers, 485 Lexington Ave., New York 17, N. Y.

Electrical and Ignition Systems

AEA Electrical Specifications Handbook—1957 edition—Gives necessary adjustment and test specifications for starters, generators, distributors and regulators on cars, trucks, tractors and construction equipment. \$1.25 each —Automotive Electric Assn., 16223 Meyers Rd., Detroit 35, Mich.

Automobile Electrical Equipment—388 pages, 350 illustrations—A complete survey of automotive electrical systems including trouble shooting and repairing. One section covers electronic ignition testers. Each \$12.50 —Chilton Co., Book Division, 56th and Chestnut Sts., Philadelphia 39, Pa.

Delco-Remy Operation and Maintenance Handbook, No. DR-324—Over 200 pages—Covers operation and maintenance of Delco-Remy electrical and ignition system. Each \$1.50—Technical Literature Section, Delco-Remy Division, General Motors Corp., Anderson, Ind., or, United Motors System, 3044 West Grand Blvd., Detroit 2, Mich.

Delco-Remy Test Specifications No. DR-324S — Test specifications for Delco-Remy electrical and ignition systems. Each 25¢—address as above.

Delco-Remy Training Charts and Manuals—Eight subjects as follows: Fundamentals of Electricity and Magnetism, Section A, No. DR-5133A, each \$3.00; Storage Batteries, Section B, No. DR-5133B, each \$2.00; Cranking Motors and Series Parallel Switches, Section C, No. DR-5133C, each \$3.00; The Ignition System, Section D, No. DR-5133D, each \$4.00; Generators, Section E, No. DR-5133E, each \$3.00; Standard Duty Generator Regulators, Section F, No. DR-5133F, each \$5.00; Heavy Duty Generator Regulators, Section G, No. DR-5133G, each \$5.00; 12-Volt Electrical Equip-

(TURN TO PAGE 274, PLEASE)



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Maintenance Manuals

Continued from Page 272

ment for Passenger Cars, No. DR-5210, Free; The Battery Side of Voltage Regulation, No. DR-5211, Free. Address as above.

Maintenance and Operation Manual, No. S-24C—178 pages—Covers starting, charging, ignition, horn, wind-

shield wiper, instrument and lighting circuits. Fully illustrated, it includes trouble-shooting data and information on 12-volt systems. Each \$1.50—Parts and Service Division, Electric Auto-Lite Co., Toledo 1, Ohio.

Specification Book, No. S-24CA—Complete test specifications for Auto-Lite electrical and ignition systems. Each 50¢—address as above.

Servicing Auto-Lite Generator Regulators, No. SD-123—62 pages—Describes and illustrates service, opera-

tion and maintenance of Auto-Lite generator regulators. Each 25¢—address as above.

Auto-Lite Education Papers—Training manuals on electrical and ignition system as follows: Fundamentals of Electricity, No. T-1, each 55¢; Magnetism, No. T-2, each 55¢; Lead Acid Storage Batteries, No. T-5, each 45¢; Ignition, No. T-7, each 95¢; Spark Plugs, No. T-8, each 70¢—Education Department, Electric Auto-Lite Co., Toledo 1, Ohio.

Alternator System Operation and Test Procedures, Training Manual No. 6—13 pages—Covers operation and testing of Leece-Neville alternator systems. Free—Technical Service Dept., Leece-Neville Co., 1374 East 51st St., Cleveland 3, Ohio.

Simplified Step-by-Step Maintenance and Repair of the Leece-Neville Standard Alternator, Form No. TS-100. Free—address as above.

Six and 12 Volt Alternator Trouble Shooting Wall Chart, Form No. TS-101. Each \$1.00—address as above.

Six and 12 Volt Alternator Installation Wall Chart, Form No. TS-102. Each \$1.50—address as above.

Blue Streak Voltage Regulator Manual—8 pages—Interesting presentation covering what to watch for to avoid trouble when installing a voltage regulator. Each 25¢—Standard Motor Products, Inc., 3718 Northern Blvd., Long Island City 1, N. Y.

Blue Streak Ignition Tune-Up Specification Chart—Wall chart gives compression, spark plug gap, distributor data, carburetor data, fuel pump, valve clearance and generator settings for Chevrolet, Dodge, Ford, GMC, International and Willys trucks. Free—address as above.

Battery Chargers and Charging—400 pages and 284 illustrations—Covers the installation, operation and maintenance of all types of battery charging systems. One chapter is about battery construction and chemistry. Each \$14.50—Chilton Co., Book Division, 56th and Chestnut Sts., Philadelphia 39, Pa.

Storage Battery Technical Service Manual—44 pages—Covers construction operation, installations, service and maintenance of storage batteries. How to make certain battery repairs (TURN TO PAGE 276, PLEASE)



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NYLON, twice as strong as any other cord... **SAFETY STEEL SHIELD®**, invulnerable to tread cuts and ruptures.

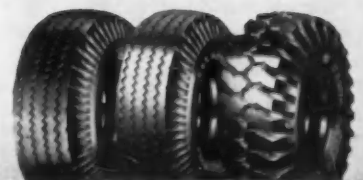
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Maintenance Manuals

Continued from Page 274

is included as well as a section on generating systems. Each 30¢—Assn. of American Battery Manufacturers, 19 North Harrison St., East Orange, N. J.

How to Increase Battery Life in Commercial Service, No. BD-669—Tips on battery care and operation.

Free—Auto-Lite Battery Division, Electric Auto-Lite Co., Toledo 1, Ohio.

Delco Batteries, Bulletin No. 7D-100—12 pages—Construction, operation, care and maintenance of Delco batteries. Free—Technical Literature Section, Delco-Remy Division, General Motors Corp., Anderson, Ind.

Delco Dry Charged Batteries, Bulletin No. 7D-100B—12 pages—Battery tips, especially on dry charge Delco batteries. Free—address as above.

Facts about Storage Batteries, No. AF1888—31 pages—Handy manual covering basic battery operation and care. Well illustrated. Each 10¢—Exide Automotive Division, P. O. Box 8109, Philadelphia 1, Pa.

Battery Service Manual—Covers maintenance, operation and care of Prest-O-Lite batteries. Free—Sales Dept., Prest-O-Lite Battery Division, Electric Auto-Lite Co., Toledo 1, Ohio.

Battery Service Manual, No. 402-1688—40 pages—Manual on battery care, how to prevent battery failure, how to avoid battery failure. Free—Willard Storage Battery Division, 246-286 East 131st St., Cleveland 1, Ohio.

12-Volt Battery Service Chart, Form No. 402-2032—Quick review with pictures on 12-volt battery service. Free—address as above.

Battery Training Manual—Gives the whole story needed to train men on battery care and maintenance. Nominal charge per copy—Delco-Remy Division, GM Corp., Anderson, Ind.

American Truck Test Specifications, 1957—Charts giving distributor tune-up data—spring tension, rotation, dwell, point gap, centrifugal and/or vacuum advance. Each \$1.00—Sun Electric Corp., Harlem and Avondale, Chicago 31, Ill.

Spark Plug Shop Manual, No. A-1920—Describes care and maintenance of spark plugs. Free—Merchandising Dept., AC Spark Plug Division, General Motors Corp., 1300 North Dort Highway, Flint 2, Mich.

Service Manual, Champion Spark Plugs, No. 7K—17 pages—Describes Champion spark plug types, construction and sizes. Includes maintenance, trouble-shooting and heat range data. Free—Advertising Dept., Champion Spark Plug Co., Toledo 1, Ohio.

Spark Plug Checking and Cleaning Procedure—Manual containing interesting tips on checking spark plug condition. Free—address as above.

Packard Cable Fleet Wiring Manual, No. A1610—22 pages—Complete review of automotive wiring with emphasis on what to look for in checking wiring. Tells how to determine correct wire size for a particular job. Free—United Motors Service Divi-

(TURN TO PAGE 280, PLEASE)

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Includes truck tire "U" Clamp with secondary and ground wires, No. 6633 Buffer Kit, No. 5213-T Threading Tool, No. 5218 Pressure-Lube Gun and package of 25 No. 6626-25 Dillelectric Nylon Patch units with Filler Rubber.

Order from your supplier or write for complete details

Always use this SAFE SURE Method

1 BUFF injury area thoroughly to completely remove all graphite mica and soap lubricants. Do not buff through liner.

2 LUBRICATE puncture hole with Pressure-Lube Gun and insert Filler Rubber with Threading Tool to seal and prevent moisture from entering puncture hole and deteriorating fabric plies.

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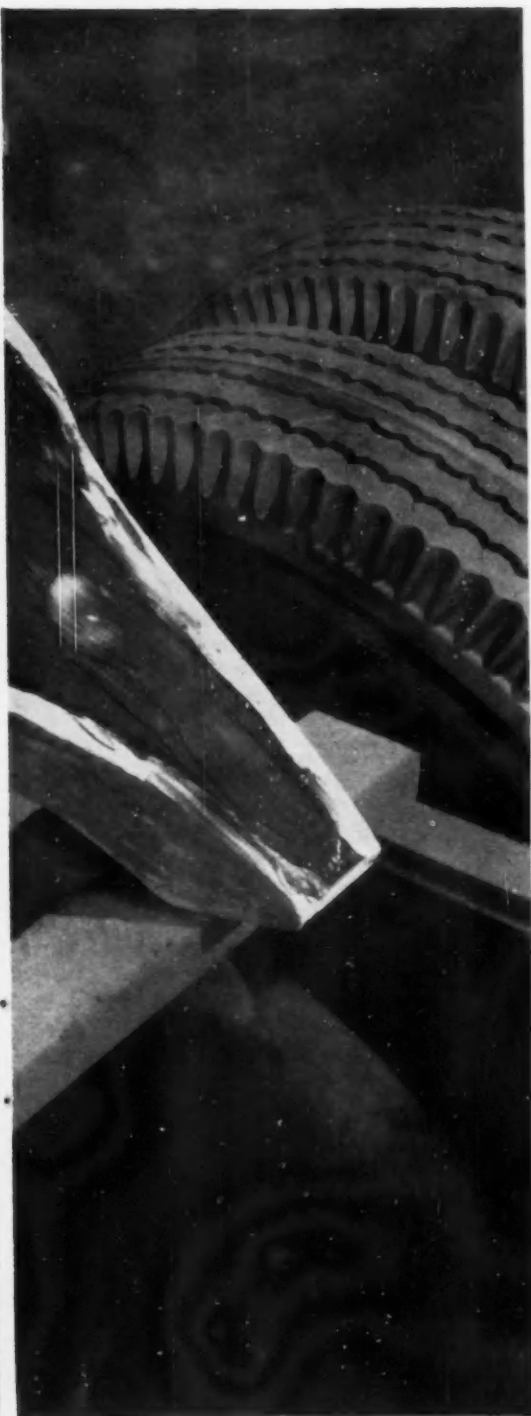
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For truck fifth wheels such as shown here and for all other chassis parts, new Gulflex Moly is the ideal lubricant. Even if the grease itself is squeezed or washed away, the molybdenum disulfide particles adhere to metal surfaces—provide a thin but durable protective film.

GREASE



can DOUBLE your truck mileage between chassis lube jobs!

- LETS YOU SCHEDULE GREASE JOBS WITH OIL CHANGES
- MAKES IT POSSIBLE TO CUT MAINTENANCE COSTS

TWO HUNDRED MILLION MILES of service with one of the largest trucking firms in the east proved it! New Gulflex Moly can actually double truck mileage between grease jobs. New Gulflex Moly cuts costs—because it lasts longer, and reduces rate of wear.

NEW GULFLEX MOLY CONTAINS MOLYBDENUM DISULFIDE . . . a remarkable anti-friction agent. Gulflex Moly withstands high pressures, is highly durable. It has great resistance to acids, alkalis and water. It's recommended for bearings, pumps, fittings, king pins, shackle bolts, torsion suspension bushings, striker plates, and all other chassis parts.

MAKES DRIVING EASIER, SMOOTHER, SAFER. If the fifth wheel between trailer and cab becomes dry, it tends to grab and there is danger of jack-knifing. New Gulflex Moly helps overcome this problem . . . makes driving easier and safer. The trucking company that road-tested Gulflex Moly says: "It's the best grease ever devised for fifth wheel lubrication."

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Maintenance Manuals

Continued from Page 276

sion, General Motors Corp., General Motors Bldg., Detroit 2, Mich.

Engines

AEA Tune-Up Manual—Illustrated manual discusses how to tune-up an engine as well as the reason for the operations. Each \$1.00—Automotive Electric Assn., 16223 Meyers, Detroit 35, Mich.

AEA Technical Training Manual, Vol. 2—Automotive Fuel Systems—With emphasis on carburetion, this manual covers service on fuel pumps, carburetors, air cleaners and governors. Each \$1.00—address as above.

Auto Repair Manual—Over 1000 pages with 3000 illustrations. Has complete specifications for all '58 model cars and those of the last 10 years. Tells how to service or repair, rebuild or replace all units. A modern up-to-date mechanic's "Bible." Each \$7.95—Chilton Co., Book Division, 56th and Chestnut Sts., Philadelphia 39, Pa.

High-Speed Combustion Engines—805 pages—By P. M. Heldt, this book covers the design and function of internal combustion engines and their components. Each \$12.00—Chilton Co., Book Division, 56th and Chestnut Sts., Philadelphia 39, Pa.

Modern Preventive Maintenance for Gasoline and Diesel Trucks—32 pages—Complete outline of preventive maintenance program for truck engine, transmission, brakes and wheels. Can be adapted for most operations. Free—GMC Truck and Coach Division, General Motors Corp., Pontiac, Mich.

Burd Handy Handbook—48 pages—Pocket-size handbook outlining operation and maintenance of the carburetor, ignition parts and timing, cooling system, bearings and oiling system, valves, cylinder head and walls, and pistons and piston rings. Free—Sales Dept., Burd Piston Ring Co., 1401 23rd Ave., Rockford, Ill.

Engine Principles and Automotive Tune-Up Fundamentals—Complete textbook covering internal combustion engine ignition, compressing, timing and carburetion. Includes maintenance, service, adjustment and operation data. Each \$2.00—Education Dept., Holley Carburetor Co., 11955 East 9 Mile Rd., Van Dyke, Mich.

The Motor Vehicle—590 pages—An easily read text with 529 illustrations. Covers all components from engines to suspensions to axles. A thorough coverage of the entire modern vehicle. Each \$14.50—Chilton Co., Book Division, 56th and Chestnut Sts., Philadelphia 39, Pa.

Service Manual for the Doctor of Motors—90 pages—Complete book on piston ring service and maintenance. Includes data on cylinder, carburetor and other engine troubles affecting piston rings. Free—Advertising Services Dept., Perfect Circle Corp., Hagerstown, Ind.

Thompson Repair and Tune-Up Manual, Vol. 2, Trucks, Buses, Tractors, Diesel Engines, Etc.—514 pages—A how-to-do-it manual covering operations necessary in engine repair and tune-up. Each \$1.50—Service Division, Thompson Products, Inc., 2209 Ashland Rd., Cleveland 3, Ohio.

The Modern Diesel—254 pages—Covers 56 different makes used in highway and construction applications. It has 210 illustrations and is (TURN TO PAGE 282, PLEASE)

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GROTE ACCESSORIES EXCEED ALL ICC AND STATE REQUIREMENTS FOR SAFETY EQUIPMENT



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C-204



T-200

Grote Clearance and Marker Lamps are available in armored, round, streamline and bee-hive types. Constructed for rugged, heavy duty use. Withstand shock, resist lens breakage. Highest quality Grotelite lens insures bright, dependable identification.



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Now available, as combination stop-tail and directional signal lamps.



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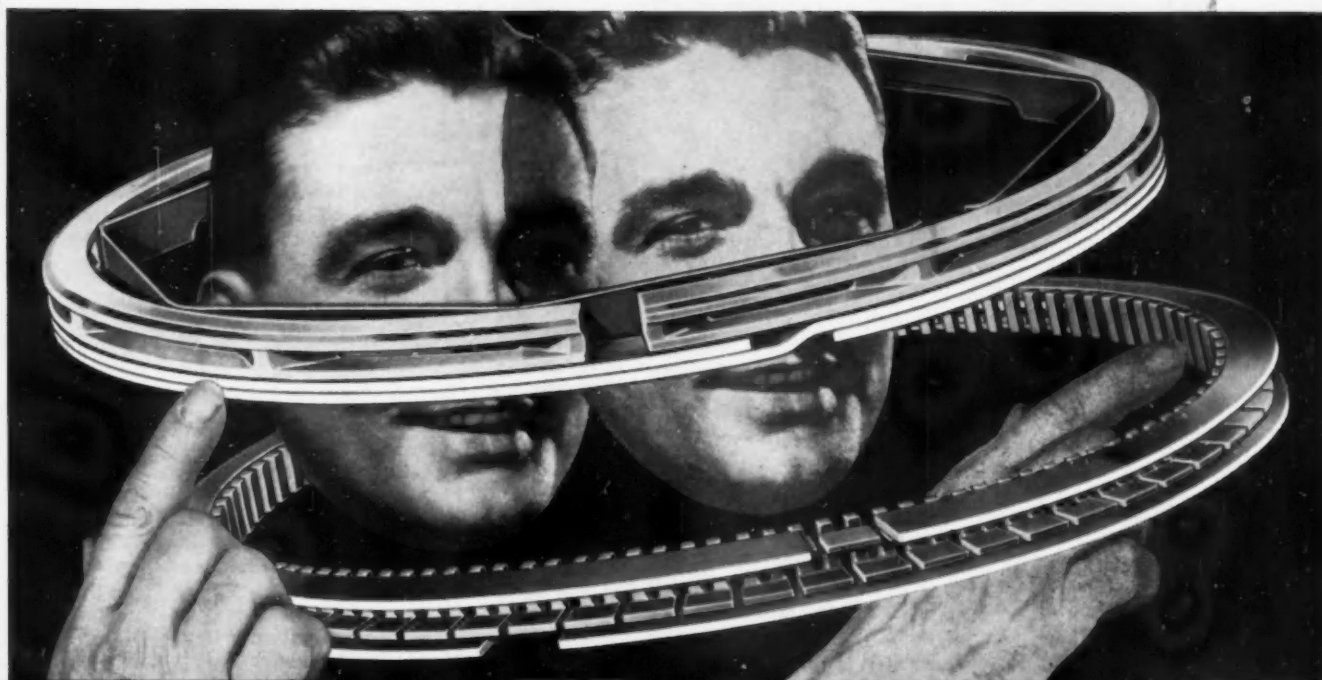
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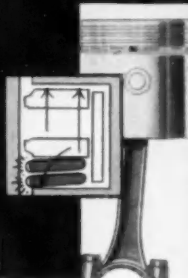
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Oil Rings to make me **DOUBLE SURE**
my ring jobs are "4-WAY PERFECT"



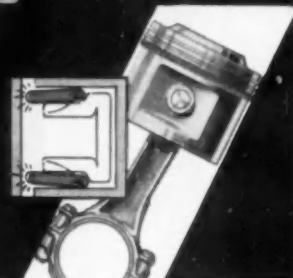
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The RAMCO Spiro-Seal Segment utilizes an exclusive, years-ahead *circumferential expansion principle* which insures high conformability to cylinder walls. It works like a watch spring to adjust to taper or wear. Riding *independently of piston groove depth*, it provides equalized radial pressure against cylinder wall for positive oil control.



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Here is the most advanced expression of the *circumferential expansion principle*. This newest advancement in ring design assures a new high in conformability. With an average of 60 outward thrusts, it adapts easily to cylinder variations and variable operating conditions, in both stop and go and high speed operations.



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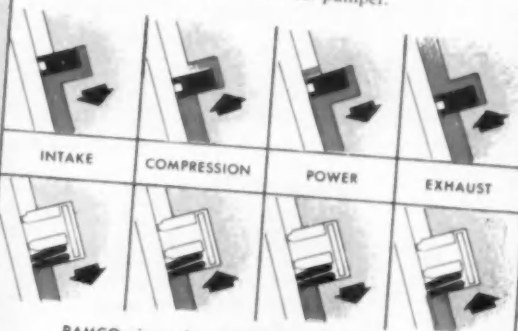


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Maintenance Manuals

Continued from Page 280

easily understood. Each \$5.00—Chilton Co., Book Division, 56th and Chestnut Sts., Philadelphia 39, Pa.

High-Speed Diesel Engines—472 pages—By P. M. Heldt, a comprehensive manual on the diesel engine including both on and off-highway truck use. Each \$7.50—Chilton Co., Book Division, 56th and Chestnut Sts., Philadelphia 39, Pa.

Diesel Maintenance—219 pages—Practical guide to maintenance of the automotive diesel engine. Each \$5.00—address as above.

Diesel Engineering Handbook—835 pages—Complete textbook on diesel engine operation and service. Several chapters specifically cover both on and off-highway automotive diesel engines. Each \$8.50—Diesel Publications, Book Division, 80 Lincoln Ave., Stamford, Conn.

Diesel Troubleshooting Chart—A quick reference chart listing 26 common complaints and causes. A handy guide for diesel mechanics. Free—Cummins Engine Co., 5th and Union Sts., Columbus, Ind.

Pedrick Engine Repair Manual—Section I, General Data, 44 pages—Section II, Passenger Car Engines, 44 pages—Section III, Truck and Bus Engines, 88 pages—Covers piston ring replacement procedures and other engine reconditioning work. Free to signers of a Pedrick Fleet Agreement—Advertising and Sales Promotion Dept., Wilkening Mfg. Co., 2000 South 71st St., Philadelphia 42, Pa.

Dynamometer Diagnosis and Adjustment Procedure for Cummins Diesel-Powered Trucks, No. C-566—Complete dynamometer diagnosis and adjustment procedure including checks for road horsepower, performance complaints and routine inspection. Free—Clayton Mfg. Co., Advertising Dept., Box 550, El Monte, Cal.

Air for Your Engine, Service Bulletin No. 16—Explains why air is important to efficient engine operation. Primarily for diesel engines, the information applies to other types of engines. Free—Cummins Engine Co., Service Publications Dept., 5th and Wilson Sts., Columbus, Ind.

(TURN TO PAGE 284, PLEASE)

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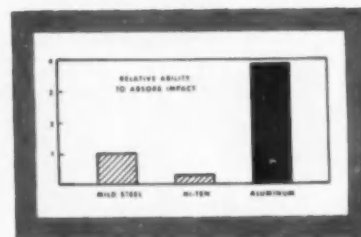
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Maintenance Manuals

Continued from Page 282

Get Ready for Winter, Service Bulletin No. 20—Complete review of winterizing service tips for diesel engines. It concludes with a one-page check list. Free—address as above.

Recommended Practices for Care and Handling of Bearings—A series of booklets covering ball, roller and

engine bearings and their oil seals. 35-mm slide-films are available for use with the booklets. See your local Federal-Mogul branch or District office.

Mechanics Engine Bearing Reference Manual—100 pages—Manual on engine bearings covering bearing fundamentals, lubrication, failure, replacement, selection, installation, construction, performance. Free—Clevite Service, The Cleveland Graphite Bronze Co., 6545 Carnegie Ave., Cleveland 3, Ohio.

Engine Bearing Service Manual—109 pages—Complete review of engine bearing operation, types, design characteristics, tools used in installation, procedure in replacing, and trouble-shooting. Each \$1.00—Advertising and Sales Promotion Dept., Federal-Mogul Service, 11031 Shoemaker, Detroit 13, Mich.

Johnson Automotive Bearing Manual—97 pages—Complete review of removal, installation and maintenance of engine bearings. Fully illustrated to provide information on trouble-shooting, lubrication, and different types of bearings. Each \$1.00—Johnson Bronze Co., New Castle, Pa.

Toledo Engine Bearing Manual—100 pages—Comprehensive manual on engine bearing purpose, construction, selection, installation and performance. Each \$1.25—The Toledo Steel Products Co., Toledo 11, Ohio.

Fleet Owner Data Book—Maintenance and operation of various models of Holley carburetors. When requesting, specify make and model of vehicle and carburetor. Each \$1.00—Education Dept., Holley Carburetor Co., 11955 East 9 Mile Rd., Van Dyke, Mich.

Know Your Carburetor, No. YC-56—46 pages—Manual on the construction, function and maintenance of carburetors. Free—Pennsylvania Refining Co., 2686 Lisbon Rd., Cleveland 4, Ohio.

Operation and Maintenance Manual, Rochester Carburetors—over 100 pages—Includes theory of carburetion, as well as operation, maintenance, service, adjustment, inspection and assembly of Rochester carburetors. Each \$1.50—United Motors System, 3044 West Grand Blvd., Detroit 2, Mich.

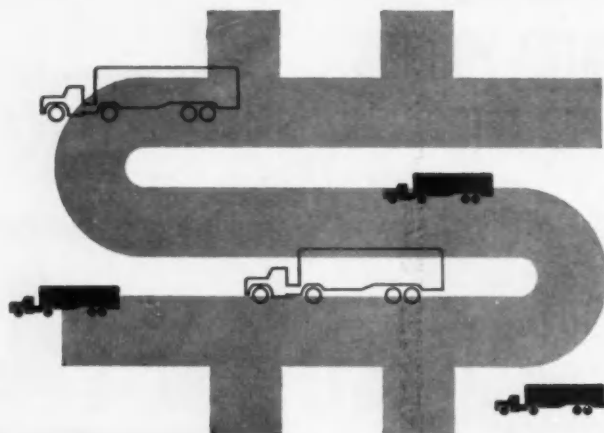
American Bosch Fuel Injection Equipment Maintenance Information, Form No. 3465—50 pages—Describes maintenance, service and operation of American Bosch fuel injection pumps, fuel supply pumps, mechanical and pneumatic governors, nozzles and nozzle holders and fuel oil filters. Fully illustrated. Each 40¢—Advertising Dept., American Bosch Corp., Springfield 7, Mass.

How to Hone Cylinders—Instructions on cylinder honing. Free—Sales Dept., Lisle Corp., 809 East Main St., Clarinda, Iowa.

(TURN TO PAGE 286, PLEASE)

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Maintenance Manuals

Continued from Page 284

Dayton Fan Belt Service Manual, No. A-861—Describes service and adjustment of engine fan belts. Free—Advertising Dept., Dayton Rubber Co., 2342 West Riverview Ave., Dayton 1, Ohio.

General Operation and Service of Automotive Pulley and Belt Drives,

Service Bulletin No. 1006—Data on operation and service, including trouble-shooting, on engine fan belts. Free—Technical Service Dept., Leece-Neville Co., 1374 East 51st St., Cleveland 3, Ohio.

Fuel Pump Shop Manual, No. A-1919—Information on operation and repair of the fuel pump, including combination fuel and vacuum pumps. Includes testing, trouble-shooting and overhauling. Free—Merchandising Dept., AC Spark Plug Division, Gen-

eral Motors Corp., 1300 North Dort Highway, Flint 2, Mich.

Hydraulic Valve Lifter Service and Installation Manual, Form No. A-2477—8 pages—Manual on hydraulic valve lifters has several excellent illustrations plus trouble-shooting tips. Free—address as above.

Fuel Pump Service Manual—16 pages—Covers service, operation, checking, maintenance and testing of Hygrade fuel pumps. Free—Advertising Dept., Hygrade Products Division, Standard Motor Products, Inc., 37-18 Northern Blvd., Long Island City 1, N. Y.

The Automotive Engine Piston—Covers operation and construction of automotive aluminum pistons. Free—Advertising Dept., Aluminum Industries, Inc., Cincinnati 25, Ohio.

Fits and Finishes—Discussion of maintenance and operation of piston pins and cylinders. Free—Advertising Dept., Sunnen Products Co., 7910 Manchester Ave., St. Louis 17, Mo.

Just What Is a Pin Fit?—24 pages—Covers piston pin fit troubles and their cures. Tells how to check pin fits. Free—address as above.

Principles of Valve and Valve Seat Reconditioning, Form No. 40—27 pages—Manual on engine valve reconditioning. Free—Literature Dept., Black & Decker Mfg. Co., Towson 4, Md.

Fuels and Lubricants

Approved Lubrication, Trucks plus Axle Units and Trailers, School Bus and Motor Coach Recommendations—108 pages—Lubrication guide for trucks, buses, trailers and axle units using "follow-the-chart" diagrams. Each \$18.00—Sales Dept., The Chek-Chart Corp., 33 East Congress Parkway, Chicago 5, Ill.

Approved Lubrication, Passenger Cars, Light Trucks—160 pages—Similar to the above for use by passenger car fleets. Each \$18.00—address as above.

Chek-Chart Truck Preventive Lubrication Maintenance Program—Said to meet requirements of ICC Safety Regs, Part 196, it consists of maintenance folder, shop work sheet, driver's vehicle report and individual lubrication charts. Write for price information—address as above.

(TURN TO PAGE 290, PLEASE)



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removes, installs all sizes wire clamps. Swivel jaws.



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Continued from Page 286

Lubrication Recommendations, Fuller Transmissions—Lubrication specifications for better maintenance. Free—Service Sales Dept., Transmission Division, Fuller Mfg. Co., Kalamazoo, Mich.

Panorama of Lubrication, Fundamentals of Lubrication and Friction Type Bearings. Free—Shell Oil Co.,

Lubricants Division, Industrial Products Dept., 50 West 50th St., New York 20, N. Y.

Panorama of Lubrication, Fundamentals of Automotive Engine Lubrication. Free—address as above.

Panorama of Lubrication, Fundamentals of Diesel Engine Lubrication. Free—address as above.

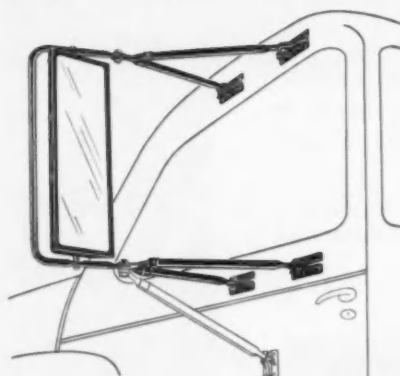
Panorama of Lubrication, Fundamentals of Lubricating Greases. Free—address as above.

Sinclair Lubrication Guide Service—8 pages, 12 pages—two booklets covering lubrication maintenance for trucks and tractors. Free—Sinclair Refining Co., Technical Service Division, 600 5th Ave., New York 20, N. Y.

Lubrication of Diesel Engines. Free—Sun Oil Co., 1608 Walnut St., Philadelphia 3, Pa.

Recommended Practices for Lubricating Automotive Front Wheel Bearings—15 pages—Covers in 42 points the servicing of front wheel bearings. Each 15¢—National Lubricating Grease Institute, 4638 J. C. Nichols Parkway, Kansas City 12, Mo.

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How to Get the Most Service from Off-the-Highway Tires—40 pages—Complete discussion of care, service, maintenance and operation of off-highway tires for longer life. Free—address as above.

B. F. Goodrich Truck Operators Handbook—Review of tire selection, tube care, dual matching and spacing, alignment, rotation, inflation, load distribution, recapping and repair, and driving habits. Free—Sales Dept., B. F. Goodrich Tire Co., Dept. 0645, 500 South Main St., Akron, Ohio.

How to Get More Recaps Out of Your Truck Tires—8 pages—Describes cost savings, recapping processes, rotation, tire care, and suggestions on when to recap. Free—address as above.

How to Get Extra Service Out of Truck Tires—24 pages—Covers overload troubles, over and underinflation, tread wear, heating, tubes, matching of duals, and driving for tire conservation. Fully illustrated to aid in truck tire maintenance. Free—Advertising Dept., Lee Tire and Rubber Co. of N. Y., Conshohocken, Pa.

Truck and Bus Tire Manual, Seiberling Product and Data Book—Pocket-size manual on tire, tube and rim (TURN TO PAGE 292, PLEASE)



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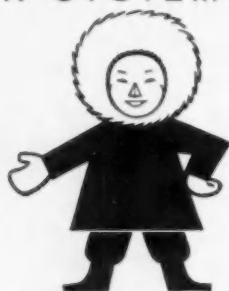
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Maintenance Manuals

Continued from Page 290

maintenance and selection. Free—Seiberling Rubber Co., Truck Tire Sales Dept., Akron 9, Ohio.

Truck Tire Load and Inflation Chart and Gasoline Mileage Indicator—Slide rule shows recommended inflation pressure for various loads for 40 different size truck tires. Other side is a handy calculator for quickly figuring miles per gallon. Free—Advertising Dept., The Tire Mart, Inc., 419 4th Ave., New York 16, N. Y.

Tubeless Tires

Tubeless Tire Instruction Booklet—Guide to servicing and trouble shooting on tubeless tires. Free—Armstrong Rubber Co., Advertising Dept., West Haven, Conn.

Tubeless Tire Servicing Chart—Illustrated wall chart on tubeless tire servicing and repair. Free—Dayton Rubber Co., 2342 Riverview Ave., Dayton 1, Ohio.

Mounting Firestone Tubeless Tires, Form No. O-B-409—Wall chart giving step-by-step instructions for mounting and demounting tubeless tires. Free—Firestone Tire & Rubber Co., 1200 Firestone Parkway, Akron, Ohio.

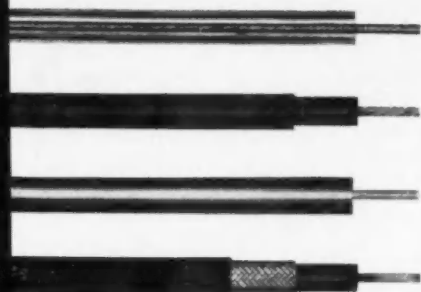
The Truth about Tubeless Truck Tires—Has comments from fleet operators about tubeless truck tires. Comments include mileage, recapping, blowouts, off-highway use and one-piece rims. Free—address as above.

How to Repair Tubeless Tires, Form No. O-B-408—Wall chart giving four illustrated, step-by-step methods for repairing tubeless tires. Free—address as above.

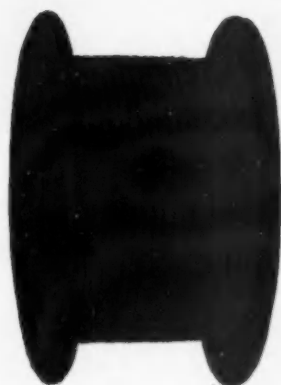
How to Repair Tubeless Tires—4 pages, illustrated—Gives basic steps for proper repair. Points out differences from tube-type tire repair. Free—Dill Mfg. Co., 700 East 82nd St., Cleveland 3, Ohio.

All You Need to Know About Tubeless Tires for Trucks—12 pages—Brief but compact review on servicing, repair and advantages of tubeless truck tires and rims. Free—The B. F. Goodrich Tire and Equipment Co., 500 South Main St., Akron, Ohio.

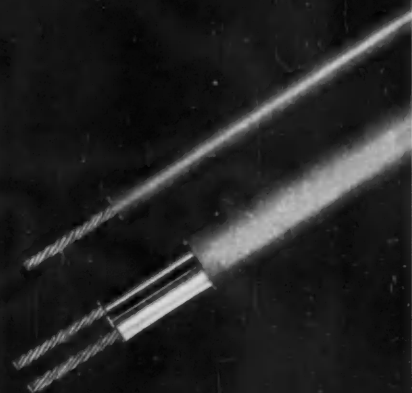
(TURN TO PAGE 296, PLEASE)



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SPARK PLUG CABLES**
plastic... neoprene...
braid and lacquer



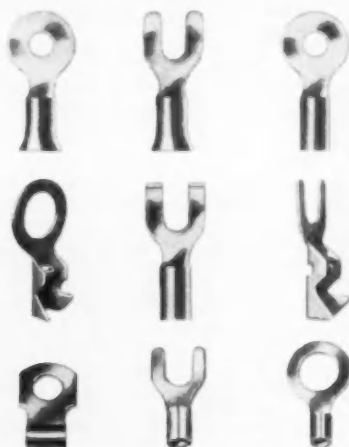
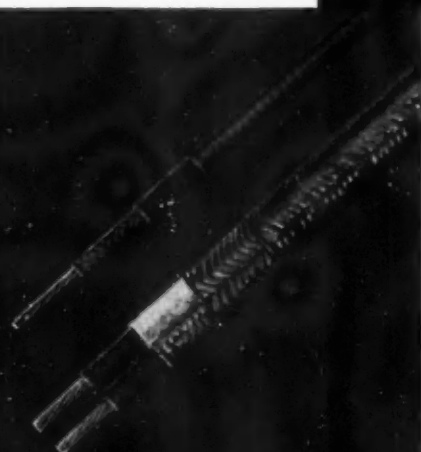
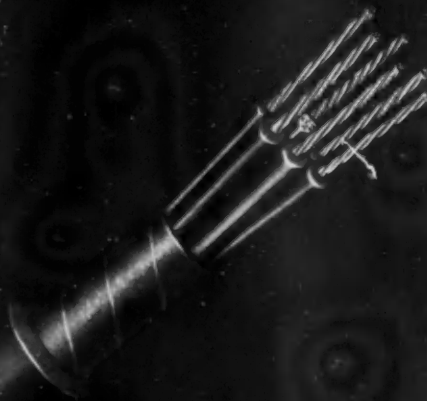
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CABLE**
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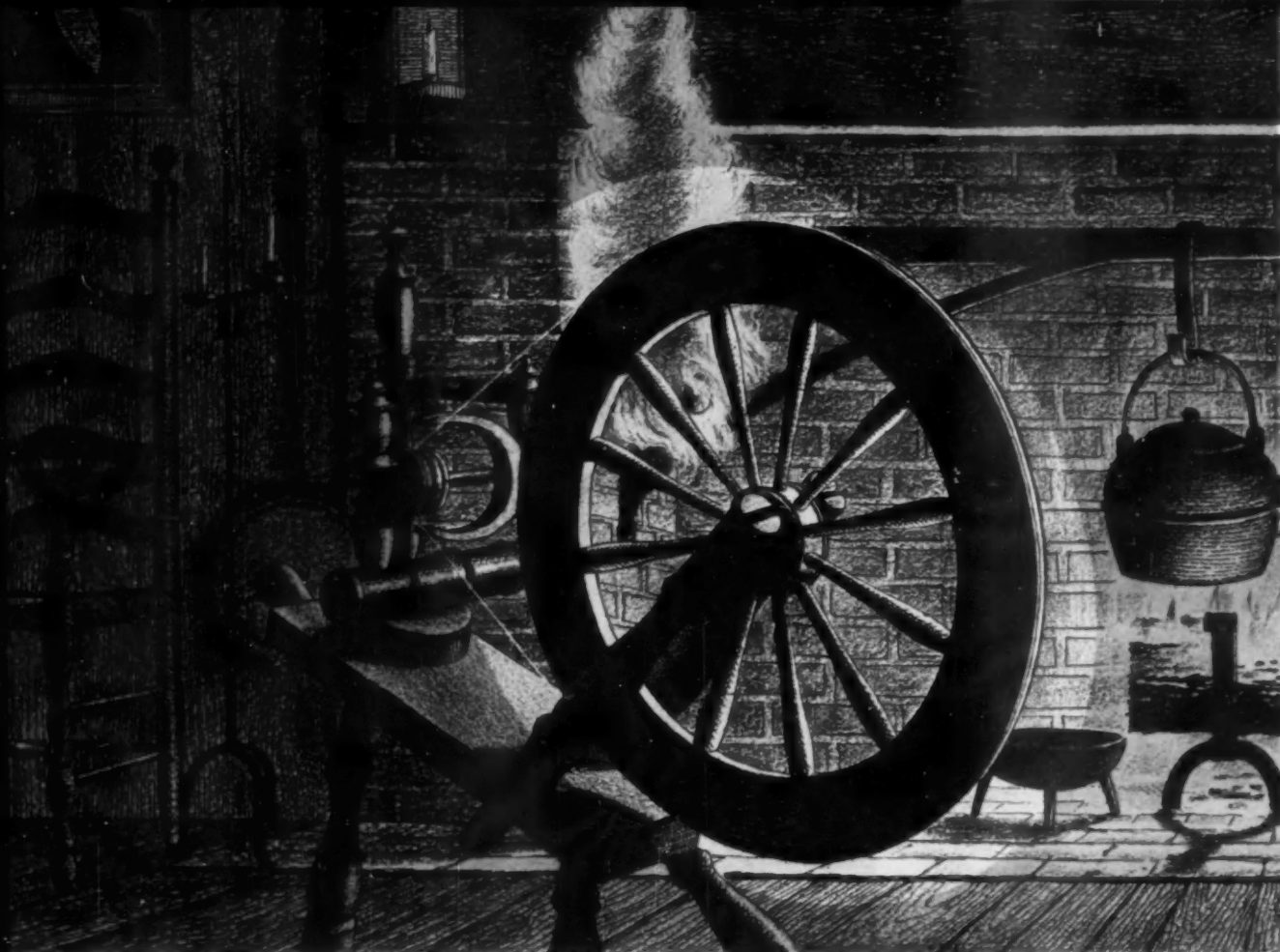


TERMINALS



TERMINALS





FAMOUS AMERICAN WHEELS

The spinning wheel, a symbol of American determination and progress, marks with historic pride the ruggedness and durability of a nation that struggled for its growth.

Today, another famous American wheel—the Budd heavy-duty steel wheel, tube type or tubeless—reflects this progress, ruggedness and durability against the expanding background of modern commercial transportation.

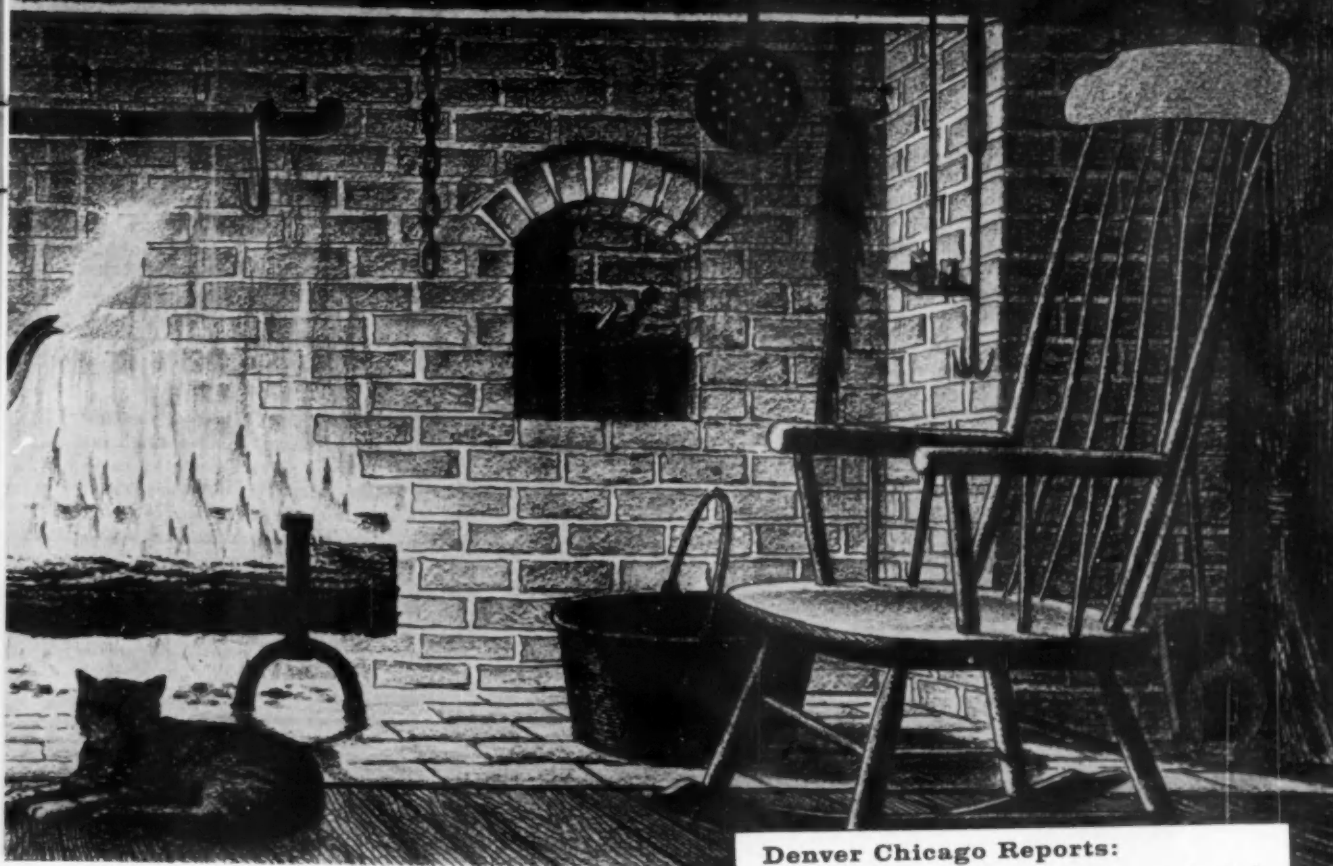
Over any kind of road, on any type of haul, Budd's "life-of-the-vehicle" steel wheels mean less down time and faster, safer, more economical runs.

NATIONWIDE SERVICE

AKRON—Motor Rim Manufacturers Co.
ALBANY—Wheels, Incorporated
ALBUQUERQUE—Wheels & Brakes, Inc.
ATLANTA—John A. Harris & Son, Inc.
BALTIMORE—Standard Wheel & Rim Co.
BIRMINGHAM—Wheel, Rim & Parts Co.
BOSTON—New England Wheel & Rim Co.
BUFFALO—Frey, the Wheelman, Inc.
CHARLOTTE—Carolina Rim & Wheel Co.
CHICAGO—Stone Wheel, Inc.
CINCINNATI—Rim & Wheel Service, Inc.
CLEVELAND—Motor Rim Manufacturers Co.
COLUMBUS—Hayes Wheel & Spring Service
DALLAS—Southwest Wheel, Inc.
DAVENPORT—Stone Wheel & Rim Co.
DAYTON—Rim & Wheel Service, Inc.


DENVER—Quinn & McGill Motor Supply Co.
DES MOINES—Des Moines Wheel & Rim Co.
DETROIT—H. & H. Wheel Service, Inc.
EVANSVILLE—Auto Wheel & Rim Co., Inc.
FARGO—Wheel Service Company
FORT WAYNE—Wheel & Rim Sales Co.
GRAND RAPIDS—Rim & Wheel Service Co.
HARRISBURG—Standard Wheel & Rim Co.
HARTFORD—Connecticut Wheel & Rim Co.
HOUSTON—Southwest Wheel, Inc.
INDIANAPOLIS—Indiana Wheel & Rim Co.
JACKSONVILLE—Southeast Wheel & Rim Co.
KANSAS CITY—Borbein, Young & Co.
KNOXVILLE—John A. Harris & Son, Inc.
LANCASTER—Standard Wheel & Rim Co.
LOS ANGELES—Wheel Industries, Inc.

LOUISVILLE—Auto Wheel & Rim Service
LUBBOCK—Southwest Wheel, Inc.
MEMPHIS—Better Wheel, Brake & Supply Co.
MILWAUKEE—Wisconsin Wheel & Rim Co.
MINNEAPOLIS—Mutual Wheel Co.
NASHVILLE—Beller Wheel, Brake & Supply Co.
NEWARK—Automotive Safety Inc.
NEW HAVEN—Connecticut Wheel & Rim Co.
NEW ORLEANS—Southern Wheel & Rim Co.
NEW YORK—Wheels, Incorporated
OKLAHOMA CITY—Southwest Wheel, Inc.
OMAHA—Morgan Wheel & Equipment Co., Inc.
OMAHA—Omaha Rim & Wheel Co.
PEORIA—Peoria Wheel & Rim Co.
PHILADELPHIA—Kay Wheel Sales Co.
PHILADELPHIA—Thomas Wheel & Rim Co., Inc.



Their built-in alignment reduces tire wear. Their rims, permanently attached to the disc, eliminate "rim creep." Also, they're easily installed; just "button-down" the ball faced cap nuts.

Investigate Budd heavy-duty steel wheels for yourself. See *why* they have become "standard equipment" for fleet owners country-wide.

Thinking of Going Tubeless? Budd has a complete line of road-tested, economical tubeless wheels, interchangeable in every case with conventional equipment. 

The Budd Company, Detroit 15.

Denver Chicago Reports:

"Within the past two years, we have modernized and expanded our equipment by purchase of 650 trailers and 120 power units.

"Budd steel wheels are specified on our fleet as standard equipment because of their light weight and low operating cost.

"60 million miles in 1957 has proven that our choice was right."

*George J. Kolowich, Jr., President
Denver Chicago Trucking Company, Inc.*



PITTSBURGH—Wheel & Rim Service
PORTLAND—Six Robbles', Inc.
PROVIDENCE—New England Wheel & Rim Co.
RALEIGH—Carolina Rim & Wheel Co.
RICHMOND—Dixie Wheel Co., Inc.
ROCHESTER—Frey, the Wheelmen, Inc.
SALT LAKE CITY—Henderson Rim & Wheel Service
SAN ANTONIO—Southwest Wheel, Inc.
SAN FRANCISCO—Wheel Industries, Inc.
SEATTLE—Six Robbles', Inc.
SOUTH BEND—Wheel & Rim Sales Co.
SPOKANE—Bearing & Rim Supply Co.
SPRINGFIELD, ILL.—Illinois Wheel & Brake Co.
SPRINGFIELD, MO.—Borbein, Young & Co.
ST. LOUIS—Borbein, Young & Co.
ST. PAUL—Wheel Service Co.

SYRACUSE—Wheels, Incorporated
TACOMA—Six Robbles', Inc.
TOLEDO—Wheel & Rim Sales Co.
WICHITA—Borbein, Young & Co.
WINSTON-SALEM—United-Automotive Service

EXPORT

CLEVELAND, OHIO—C. O. Brandes, Inc.
4900 Euclid Avenue

CANADA

CALGARY—Mutual Supplies, Ltd.
EDMONTON—Alberta Wheel Distributors, Ltd.
MONTREAL—Auto Wheels & Supplies, Ltd.
TORONTO—Wheel & Rim Co. of Canada, Ltd.
VANCOUVER—Wheels & Equipment, Ltd.
WINNIPEG—Fl. Garry Tire & Auto Supplies, Ltd.

Budd

Maintenance Manuals

Continued from Page 292

Tubeless Off-the-Road Tires and Rims, Form No. S-1187—Seven pages of illustrated servicing methods for handling tubeless tires for off-highway equipment. Free—Advertising Dept., Goodyear Tire & Rubber Co., Akron 16, Ohio.

Complete Guide to Proper Service and Repair of Tubeless Tires—12

pages—Illustrated manual on tubeless tire servicing. Includes a 22 point "Do" and "Don't" list and a review of six ways to repair a tubeless tire. Free—Jack P. Hennessy Co., 12 Depot Square, Englewood, N. J.

Tubeless Truck Tire Service Manual, Form No. C-384—4 pages—Compact service data plus recommended rim and valve sizes for tubeless tires. Free—Advertising Dept., Lee Tire & Rubber Corp., Conshohocken, Pa.

Tubeless Automobile Tires, Mounting, Demounting and Repairing—8

pages—Describes tubeless tire servicing including preparation of the rim, valve installation, tire mounting, inflation, demounting and repair. Free—Rubber Manufacturers Assn., 444 Madison Ave., New York 22, N. Y.

How to Service Tubeless Truck Tires—12 pages—Basic and complete guide to servicing tubeless truck tires. Free—address as above.

How to Mount and Demount Tubeless Tires on New-Type 14 and 15-in. Rims, RMA No. 1256—Single page illustrated instruction sheet for 1957 model rims. Free—address as above.

Passenger Car Tires—Care and Service—24 pages—Shows what can happen to tires from abuse and misuse. Tire pressure recommendations for all passenger car tires are given. Single copies free—address as above.

Tools and Procedures

How to Run a Lathe—128 pages—Training manual on care and operation of a metal working lathe. Each 50¢—Sales Dept., South Bend Lathe Works, South Bend 22, Ind.

How to Run a Drill Press—31 pages—Information on various drilling methods. Each 25¢—address as above.

Torque Manual, 2nd Edition—28 pages—Covers the application, principles and special adapters for torque wrenches. Free—Sales Dept., P. A. Sturtevant Co., Addison, Ill.

Trailer PM Practices—Compiled by the Truck-Trailer Manufacturers Assn. Covers routine trailer PM and ICC inspection and maintenance requirements. It's offered free from Berg Mfg. and Sales Co., 1712 S. Michigan Blvd., Chicago 16, Ill. or 50¢ each from TTMA, 710 Albee Bldg., Washington 5, D. C.

Fruehauf Tank Trailer Repair Manual—31 pages—Comprehensive manual on repair of tank trailers. Includes procedure for explosive testing, ICC regulations on tank trailer transport as well. Free—Fruehauf Trailer Co., 10940 East Harper Ave., Detroit 32, Mich.

Spray Painting Hints—Brief folder listing possible spray painting troubles and suggestions for correcting them. Binks Mfg. Co., 3114 West Carroll Ave., Chicago 12, Ill.

(TURN TO PAGE 298, PLEASE)

VERSATILITY

Plus

... BARTLETT'S PROVEN QUALITY

MORE JOBS HANDLED BETTER BY BARTLETT



All Railroad Piggy Back Loading Time Reduced



House Moving—5th Wheel lifts house up and helps to roll on new foundation



Fishy Back operations could not manipulate economically without this help.



Dumping Oranges from Groves into Washing Pits—materially cuts costs



Lift Boom Mounted on 5th Wheel can Boom or Lift any ordinary Tractor and tow in

SIMPLICITY IN MOUNTING

Can Be Done in

Any Good Truck Shop

Unit complete with P.T.O., Pump, Shaft-Valves. With special Heavy Duty 5th Wheel.

Load is not carried on cylinders but rolls in track cuts line pressure and ring replacements

OUTLIVES ANY OTHER

2 TO 1

BARTLETT HYDRAULIC 5TH WHEEL



Shipped Assembled Ready to Mount

Bartlett

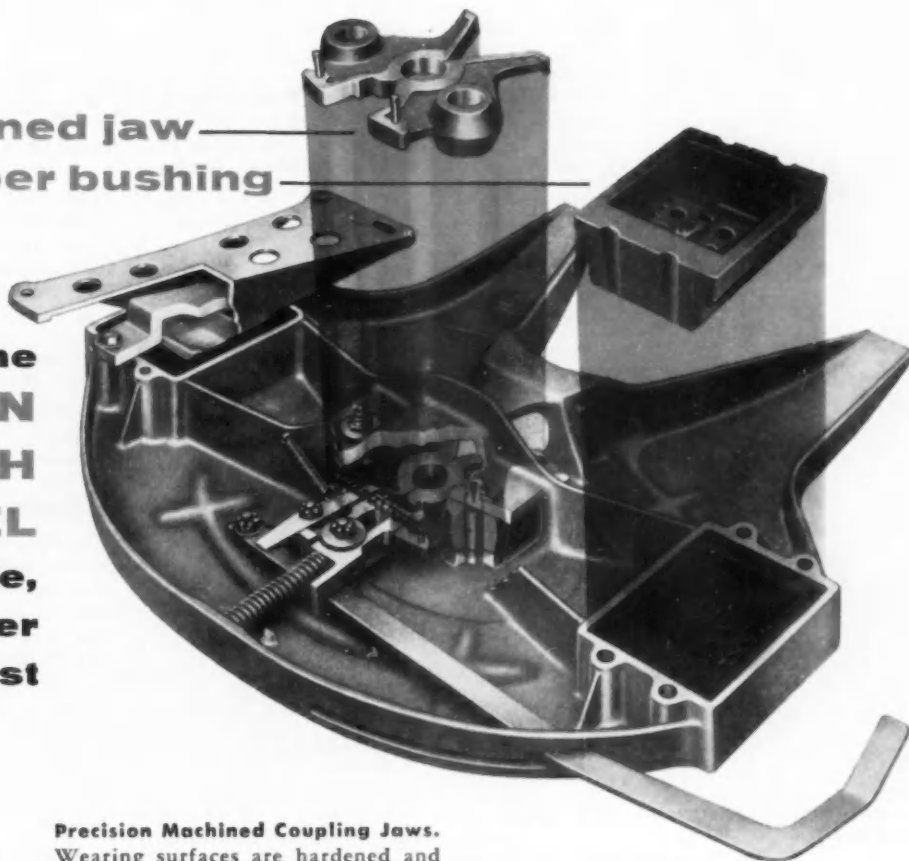
TRAILER CORPORATION

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2 Major Advances in Fifth Wheel Design!

a machined jaw
and rubber bushing

give the
**DAYTON
FIFTH
WHEEL**
longer life,
lower
service cost



For complete
data on this re-
markable fifth
wheel, write
for our catalog.

Precision Machined Coupling Jaws. Wearing surfaces are hardened and ground to exacting specifications to guarantee longer life . . . lower maintenance cost . . . greater safety! 360° locking surface around the king pin.

Rubber Compression Bushing. Combines bushing and shock absorbers into one simplified unit. Requires no greasing. Eliminates wear and reduces replacement cost normally present when a less desirable metal-to-metal bushing is used.

Light Weight . . . up to 50 pounds lighter than other models, easy to operate. One-operation locking device prevents accidental unlocking. Simplest locking device yet developed!

Better Lubrication. Pressure grease fittings on jaw pins and base are factory assembled. Moving parts are lubricated with corrosion-resistant grease.

Make sure you get the best and safest made . . . specify Dayton Fifth Wheels on original equipment and replacement.

Buying a truck or trailer? Make sure it's equipped with Dayton Light Weight Cast Steel Wheel and Brake Drum Assemblies —used by 21 of the nation's leading truck and trailer manufacturers.



DAYTON FIFTH WHEELS

by The Dayton Steel Foundry Co. • P.O. Box 1022, Dayton 1, Ohio

World's leading manufacturer of cast wheels and brake drums

Maintenance Manuals

Continued from Page 296

Making the Most of the Spray Painting Method—32 pages—Illustrated information on how-to-do spray painting together with instructions on proper care of equipment. Free—Sales Dept., DeVilbiss Co., Toledo 1, Ohio.

The ABC of Spray Equipment—Interesting facts on care and maintenance of spray painting equipment. Free—address as above.

Hot Spray Application of Automotive Finishes—Summary of information on hot spray painting. Free—Automotive Division, Sherwin-Williams Co., 101 Prospect Ave., N. W., Cleveland, Ohio.

Metal Preparation, Bulletin No. 4, Form No. O-274—6 pages—Well presented summary on preparation of metal surfaces for painting. Free—address as above.

Modern Baking, Bulletin No. 3, Form No. O-262—6 pages—Up-to-date report on how to attain best results with paint baking. Free address as above.

How to Repair a Reinforced Plastic Fender—A step-by-step illustrated outline on the repair of fiber glass reinforced plastic body components. Free—Lunn Laminates Inc., Sales Dept., Huntington Station, Long Island, N. Y.

You Can Fix Cars, Chilton Automobile Repair Manual—816 pages—Comprehensive repair manual for passenger cars. Each \$7.95—Chilton Co., Book Division, 56th and Chestnut Sts., Philadelphia 39, Pa.

Handbook of Automotive Shop Kinks—64 pages—Handy volume of illustrated shop kinks covering all parts of automotive service. Each \$1.00—address as above.

Welding Techniques

Recommended Safe Practices in Cutting and Welding—Pocket-size manual that covers welding safety from all angles. Free—Air Reduction Sales Co., 150 East 42nd St., New York 17, N. Y.

Safety in Electric and Gas Welding and Cutting Operations—Manual on safety in welding and cutting procedures. Each 50¢—American Welding Society, Inc., 33 West 39th St., New York 18, N. Y.

Fundamentals of Welding—560 pages—A revised handbook covering all basic welding problems. Comprehensive in scope. \$9.00 each—address as above.

Safe Practices for Welding and Cutting Containers That Have Held Combustibles—Manual on safety in welding gas tanks and other tanks to avoid explosions and other dangers. Each 50¢—address as above.

Truck and Car Fleet Maintenance and Repair Welding Manual, No. TIS 1010—56 pages—Covers almost all welding operations in fleet maintenance. Free—Eutectic Welding Alloys Corp., 40-40 172nd St., Flushing, N. Y.

How to Get Better Welds—60 pages—It's a revised edition of Weldor's Vest Pocket Guide and explains proper welding procedures, positions, troubles and types of joints. Free—
(TURN TO PAGE 300, PLEASE)



PENN Aluminum DUMP BODIES

Pay a \$40
daily dividend
to this Pa.
operator

PENN ALUMINUM TRUCK BODIES

provide:

- Greater payloads
- Maintenance savings
- Increased tire and gas mileage

A Pennsylvania truck operator installed PENN Aluminum Bodies and front mounted telescopic hoists on 4 truck units and realized a daily dividend of 20 tons—and \$40.

With the Penn installations, the vehicle weight was trimmed from 16,800 pounds to 14,800 pounds . . . the payload was increased by one ton of coal or slag on every haul. Operating four truck units, each making five trips a day and earning \$2 per ton, the payload dividend added up to 20 tons or \$40 EXTRA PROFIT daily. In addition, the reduced weight on empty return trips effected an additional estimated 10% increase in tire and gas mileage.

PENN FRONT-MOUNTED HOISTS are . . .

- Light-weight
- Safer operating
- More economical

Make hauling more profitable . . . install PENN!

Your Inquiries are welcome

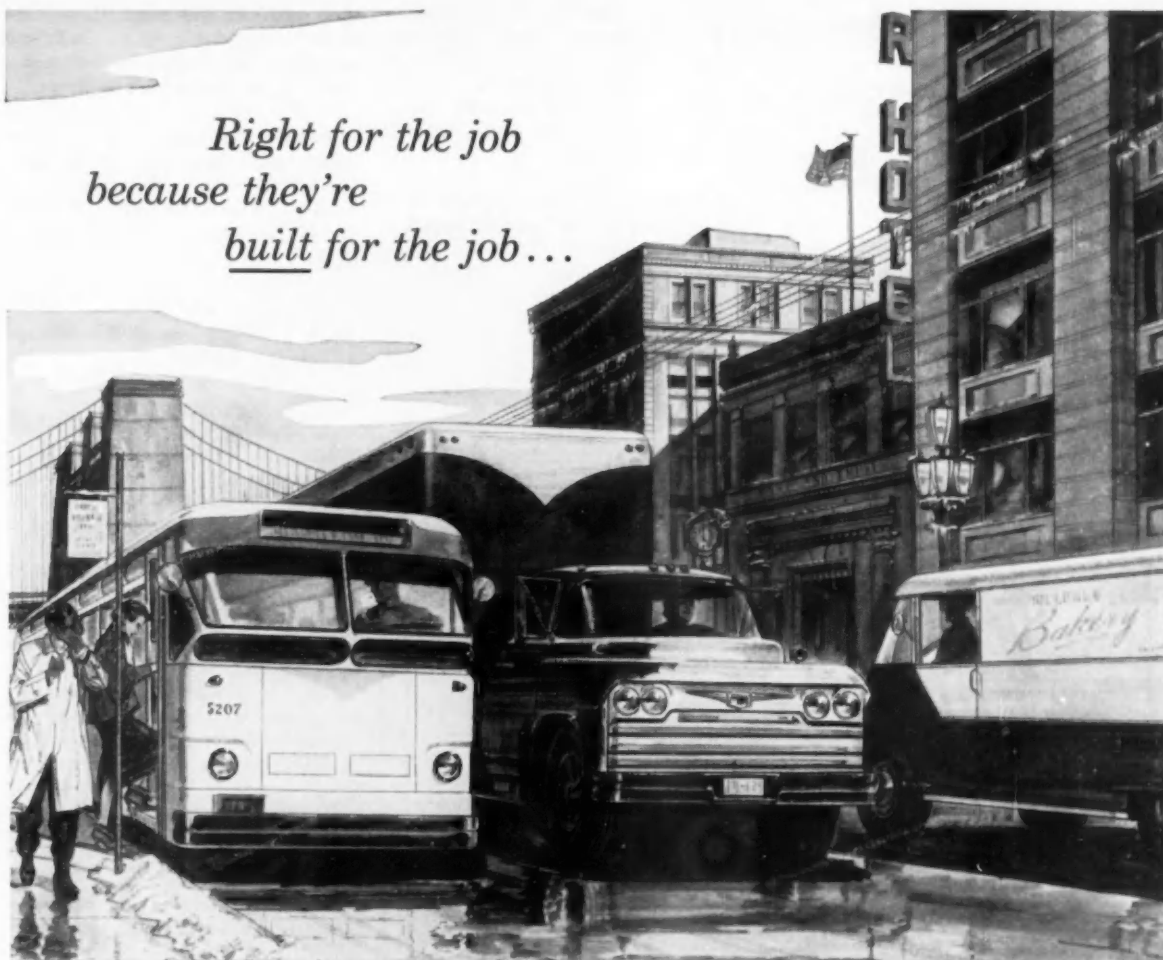
Truck Body Specialists with 23 years' experience in the use of telescopic hoists.

PENN BODY DIVISION

**HOCKENSMITH
CORPORATION**

PENN. PA. Call: Jeannette, Pa., Lafayette 3-5401 . . . Pittsburgh, Electric 1-1242

*Right for the job
because they're
built for the job...*



EVANS HEATERS ARE RIGHT FOR TRUCKS BECAUSE THEY'RE BUILT FOR TRUCKS

Evans heaters . . . designed specifically for trucks and buses . . . are built for heavy-duty operation.

An Evans heater keeps the driver comfortable with a continuous flow of fresh, warm air. It also provides ample defrosting, keeping the windshield and side windows clear at all times.

Evans heaters do a better heating job because they provide both high BTU ratings and proper heat distribution. Without proper heat *distribution*, high BTU ratings are meaningless.

There's an Evans Heater for every commercial vehicle in use today. Each is backed with a parts "repair or replace" warranty good for a full year or 50,000 miles, whichever occurs first.

If you want the best "heat insurance" you can buy for your trucks, write for full information to Evans Products Company, Dept. Q-4, Plymouth, Michigan.

Regional Representatives: Cleveland, Frank A. Chase; Chicago, R. A. Lennox Co., Inc.; Detroit, Chas. F. Murray Sales Co.; Allentown, Pa., P. R. Wiedner

EVANS PRODUCTS COMPANY ALSO PRODUCES:

railroad loading equipment; bicycles and velocipedes; Evaneer fir plywood; fir lumber; Evanite battery separators; Evanite hardboard; Haskelite doors; Evanite Plywall.



EVANS PRODUCTS COMPANY • PLYMOUTH, MICHIGAN

COMMERCIAL CAR JOURNAL, April, 1958

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Maintenance Manuals

Continued from Page 298

Ask for Form No. EW-201. Hobart Brothers Co., Hobart Square, Troy, Ohio.

How to Build Your Own Arc Welder—Handy booklet illustrating many varieties of shop-assembled portable and other arc welding rigs. Free—address as above.

Metals and How to Weld Them—322 pages—Complete text book on welding, welding trouble shooting, how to weld various metals. Each \$2.00—The James F. Lincoln Arc Welding Foundation, P. O. Box 3035, Cleveland 17, Ohio.

Weldability of Metals—Data on welding of different metals. Each 50¢—Lincoln Electric Co., 22801 St. Clair Ave., Cleveland 17, Ohio.

New Lessons in Arc Welding—320 pages, illustrated—This revised book

is a reference and text. Covers the whole arc welding story including equipment, procedures, tests and weld symbols. \$1.00—address as above.

Welding Precautions and Safe Practices—Information on welding technique with emphasis on safety in welding. Free—Linde Air Products Co., 30 East 42nd St., New York 17, N. Y.

Training Films For Mechanics

THIS LIST of maintenance training films has been selected to provide effective and efficient instruction for mechanics in bus and truck fleets. The step-by-step procedures and the basic background material will ideally supplement other instruction, save you time and money in the long run.

Following the title of each film is the running time, a brief description of the film, whether free loan or rental, and a numerical reference to the source list beginning on page 318.

Most of these films are available for your use without cost—you pay only transportation and insurance. Others carry a nominal rental charge. Projectors for showing them, if not otherwise obtainable, can usually be rented in any city at low cost. Because of demand, films should be ordered as far in advance as possible.

Films in this list are 16 mm sound films unless otherwise indicated and should never be shown in silent type projector as it destroys the sound track.

For your convenience, films in this section have been divided into the following sections:

Subject	Begins on page
Brakes	300
Clutches, Transmission	303
Electrical, Ignition	303
Engines	304
Fuels, Lubricants	306
Tools & Procedures	310
Welding Techniques	314

Brakes

Air Brakes, Operation and Maintenance, Part 1—24 min—Covers truck and tractor air brakes. Free loan—4.

Air Brakes, Operation and Maintenance, Part 2—21 min—Covers trailer air brakes. Free loan—4.

(TURN TO PAGE 303, PLEASE)



**How do YOU
clean an
ENGINE BLOCK?**

**AUTOMATIC
POWER
AGITATED
HOT TANK**

**Hot wash
an entire
engine block
or 200 lbs.
of Parts
FAST!**

**DOES IN
MINUTES
WHAT FORMERLY
TOOK HOURS!**

**Klee-Flo
POWERMASTER
DEGREASER**

**HI-T
GREASE OFF**

**RECOMMENDED
CLEANING
COMPOUND!**

**CALL, WIRE,
WRITE FOR
INFORMATION**

Rapid vertical strokes of the motor-driven rack create a washing pressure in the heated cleaning compound, flushing off grease and grime without mess.

The Klee-Flo POWERMASTER is equipped with a powerful gas immersion type heating unit which works equally well with natural, manufactured or bottled gas.

CAN BE USED AS A COLD WASHER TOO!

America's Foremost Producer of Parts Cleaning Equipment

PRACTICAL MFG. CO.
2840 4TH AVE. S. • MINNEAPOLIS, MINN.



What Bill Barranco

thinks of

P&H DIESEL

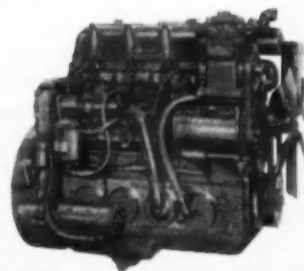


When Mr. Wm. S. (Bill) Barranco, president of Liberty Trucking Co., sees reports from his fleet, he knows that P&H Diesels deliver "far above average performance." Mr. Barranco says, "The steady flow of uniform power and speed has reduced our running time without overspeeding."

Until Harnischfeger developed the P&H Diesel, fleet operators had to be satisfied with operating characteristics which did not fully utilize the potential of the diesel engine. But now, P&H Diesels have changed this situation with:

- faster starting, better idling than any diesel engine on the road
- highest horsepower per pound of weight
- 25% fewer working parts and all wearing parts interchangeable
- exclusive "Unitized" power assembly that can be replaced in less than 60 minutes.

Specify the one diesel with all the features that deliver top performance—P&H Diesel. P&H Diesel Engine Division, Crystal Lake, Illinois.



P&H DIESELS

Fastest Growing Name in Diesel Power

You are probably in a "diesel rut," if you haven't compared the performance and operating costs of the P&H Diesel with other diesels recently.

Want the Nylon Truck Tire that's best for you?

KELLY HAS IT!

"We have been using Kelly tires on our equipment for approximately 15 years. All of our new equipment is ordered with Kelly Tires. We are using Kelly Super Armor Trac nylons and Kelly C. H. T. nylons to our complete satisfaction, both from the original tread and from being able to recap them 2 to 3 times. By using Kelly Super Armor Trac nylons and Kelly C. H. T. nylons, we have had a minimum loss of time due to breakdowns and have kept our cost-per-mile down."

Fred Peters, Shop Superintendent
L. C. L. Transit Company, Green Bay, Wis.



"We have tried most first line tires in the past five years. We had too much tire failure and fast tread wear. Then we switched to Kelly-Springfield Nylon C.H.T. Tires and have eliminated road failures and we get longer tread wear. We get up to 90,000 miles on our 390-mile overnight run with perishable poultry. Kelly tires give more tire wear per dollar."

Thomas T. Stamulis
Stamulis Brothers, Inc., Saugus, Mass.



No matter what type of trucking you do, Kelly has exactly the Nylon Cord Tire that will deliver more original mileage, more mileage on recaps—to give you the most for your tire money on a cost-per-mile basis. That's why Kelly Nylon Cord Tires are used exclusively

on so many trucks and fleets of trucks all over America. It will be worth your while to find out how tougher, longer-lasting Kellys can bring you safer, more dependable service at lower cost. See your Kelly Dealer or write to: The Kelly-Springfield Tire Co., Cumberland, Md.



NYLON CORD
TRACTOR RIB

NYLON CORD
DUAL TRAC

NYLON CORD
C. H. T.

NYLON CORD
SUPER ARMOR TRAC

KELLY
Springfield
TIRES

THERE'S A TOUGH KELLY
FOR EVERY TRUCKING JOB

Maintenance Films

Continued from Page 300

Short Stops—10 min—Describes operation of automobile hydraulic brakes and how to use them effectively. Free loan—13.

Taking the Guesswork Out of Brake Work—60 min—Color film covers servicing, trouble shooting, operation and maintenance of brakes. Free loan—40.

Wagner Air Brakes—30 min—Shows operation of both straight air and air-over-hydraulic systems. Uses cutaway units, slow motion sequences to show how the air brake works. Free loan—45.

Clutches and Transmissions

Automatic Transmission—10 min—Using a passenger car, shows how automatic transmission compares with standard shift. Also shows how to drive with automatic transmission for maximum efficiency. Rent-25.

Hydraulic Controls in HydraMatic Transmission—26 min—Explains basic shifting patterns and shows how hydraulic controls are applied in each phase of up shifting and down shifting. Free loan—41.

R45 Road-ranger—20 min—In color, it covers operation and construction of the Fuller R45 "Road-ranger" transmission. Free loan—15.

Service Procedure for Ball Bearings—20 min—Instructional film showing how to remove, service and install ball bearings in vehicles. Free loan—17.

That's the Torque Converter—22 min—Detailed showing of principles of torque conversion. Free loan—2.

Electrical and Ignition Systems

Ignition Engineered—35 min—Describes function and operation of the ignition system. Free loan—10.

Ignition and Spark Plugs—19 min—Illustrates cleaning and testing of spark plugs. Shows relationship of spark plug to ignition system. Free loan—5.

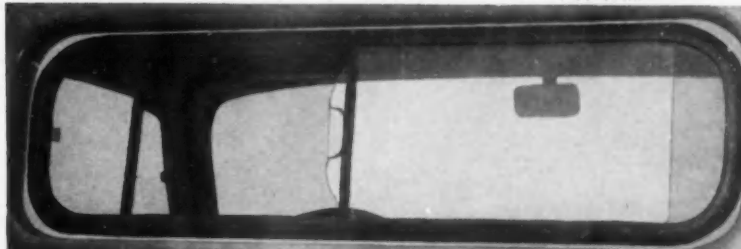
Johnnie Plug Check—30 min—Color film on procedure for checking spark plugs. Free loan—10.

Story of a Spark Plug—33 min—shows how to install spark plugs and (TURN TO NEXT PAGE, PLEASE)

BARBER'S

DELUXE SLIDING REAR WINDOWS for All Trucks

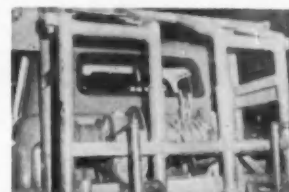
GETS THE JOB DONE!



Pat. Nos. 2,770,487—2,805,097 Other Pat. Pend.

Immediate Delivery

- 1947-58 Auto Car
- 1947-58 Chevrolet
- 1948-58 Dodge
- 1954-58 Diamond "Ts"
- 1948-58 Ford
- 1947-58 GMC
- 1954-58 Internationals
- 1950-58 Macks B & D Models
- 1951-58 Reo
- 1941-58 Studebaker
- 1952-58 White (3000 Series)



Chevrolet & GMC



Ford

Barber's Deluxe S-L-I-D-I-N-G Rear Truck Windows answer the many problems . . . Give Drivers full-view rear work opening to operate winch controls, straighten cables, true air conditioning without refrigeration and hear instructions . . . Gives Management a Faster, Safer Job.

- Fits original rear cab opening!
- Installs in just 20 minutes!
- All units contain Safety Glass!
- Completely Weather Proof!
- Locks When Closed!

2/3 of the Truck Assembly Lines in the United States are now installing Barber's Deluxe Sliding Rear Windows . . . order your new Trucks with this equipment. You'll be glad you did!

When ordering please include make, model and year. Installation instructions with each unit. Overnight delivery to many areas.

Also Units Available for Crew (Cabs) Shelters, Sleepers, Flat Backs, Station Wagon, Sedan Delivery, Panel Trucks and Units Made to Order.



BARBER'S GLASS & MANUFACTURING CO.

13215 HARRISON, BOX 588, Phone FOrest 5-4358, OKLAHOMA CITY, OKLA.

Maintenance Films

Continued from Page 303

describes causes of faulty performance. Also includes spark plug manufacture. Free loan—5, 42.

Story of the Storage Battery—32 min—Describes principle, operation and use of the storage battery. Also covers battery manufacture. Free loan—42.

Engines

The ABC of Internal Combustion—13 min—Animated, color film explaining basic principles of internal combustion engines. Free loan—17. Rent—25.

The ABC of the Automobile Engine—18 min—Animated, color film describing in detail parts and workings of internal combustion engines. Follow-up film to "The ABC of Internal Combustion." Free loan—17. Rent—25.

The ABC of the Diesel Engine—20 min—Animated, color film on diesel engine fundamentals. Follow-up film to "The ABC of Internal Combustion." Free loan—17. Rent—25.

Automotive Trouble Shooting. Part 2: Engine Tune-Up—33 min—Includes manifold vacuum and compression checks, battery and ignition cable checks, spark plug checks, distributor and ignition timing check, fuel system check, carburetor tests. Free loan—41.

Carburetor, Principles of Operation—25 min—Shows components, how carburetors operate—venturi principle, metering, vaporization, carburetor circuits. Free loan—41.

Cylinder Block Overhaul—30 min—Covers engine overhaul on a Continental R600 engine. Free loan—7.

Cylinder Head Overhaul—30 min—Describes procedure for cylinder head overhaul on a continental overhead valve engine. Free loan—7.

Diesel Story—20 min—Thorough explanation of the principle of the four-stroke diesel engine. Free loan—35.

Diesel . . . The Modern Power—21 min—Both 4 and 2-cycle engines are discussed. Engine is assembled and function of each part explained. Free loan—17, 42.

Engine Tune-Up—30 min—Tune-up and preventive maintenance with Continental engines and Diamond T trucks is described in this film. Free loan—7.

Fundamentals on Film—8 films, 6 to 8 min each—Brief training films designed for oil company marketing training. Included are basic maintenance on (1) cooling system, (2) electrical system, (3) distributor, (4) spark plugs, (5) valves, (6) carburetor, (7) gasoline (two films). Free loan—11.

A Good Valve Job Pays—23 min—Describes complete procedure for doing a valve job. Free loan—11.

International Diesel Power—20 min—Explains features and shows operation of the International diesel engine. Free loan—20.

The Power Within—20 min—Describes the creation of power in the automobile internal combustion engine. (TURN TO PAGE 306, PLEASE)

the best costs less

Simplicity is the word for ROOSA MASTER fuel injection pumps. Small in size and weighing less than 10 pounds, there are fewer parts to service, fewer adjustments, which means lower service costs.

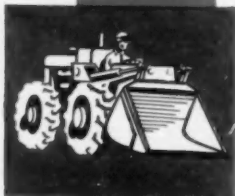
Only one model size is adaptable for either a 2, 3, 4, 6 or 8 cylinder engine. Compare its initial cost and installation cost for further proof that the best costs less.

HMS

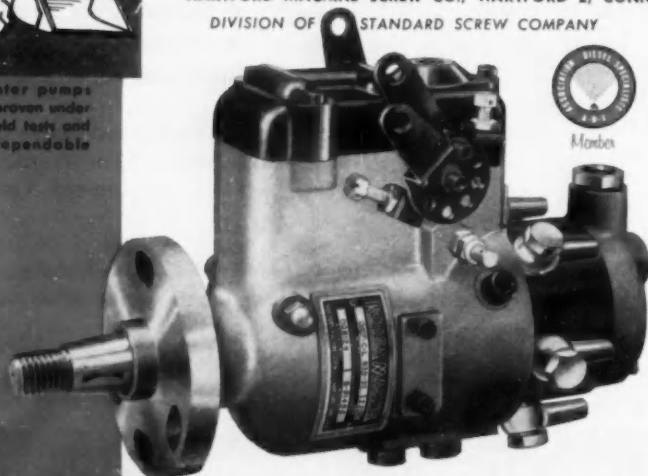
ROOSA MASTER

makes
good
diesels
better

HARTFORD MACHINE SCREW CO., HARTFORD 2, CONN.
DIVISION OF STANDARD SCREW COMPANY



Roosa Master pumps have been proven under extensive field tests and years of dependable service.



YOU CAN DEPEND ON THE DIESEL THAT DEPENDS ON ROOSA MASTER



Nylon cuts Norwalk's tire costs



"Nylon cord tires have reduced carcass breaks and road delays. Now we get more service from our 3,400 vehicles, at lower cost"

REPORTS HERALD HOWELL, TIRE MANAGER AT NORWALK TRUCK LINES IN OHIO

"Today all the replacement tires we buy are made with nylon cord," says Mr. Howell, shown above as he and Norwalk's maintenance supervisor inspect a set of nylons. "I expect about 125,000 miles' service on original tread and 40,000 miles on each retread with the 10:00x20 extra tread tires shown here. Our mileage records indicate that nylon cord tires last 10% longer on original tread than tires made with ordinary tire cord. What's more, costly road delays have all but disappeared with the use of nylon. When re-capped, these tires stand up better because the tire body is tougher and runs cooler."

Operating out of Michigan, Indiana, and northern Ohio, Norwalk's 500 delivery trucks, 950 tractors and 1,950 trail-

ers get heavy service, mostly on main highways where the heat generated by high speeds is severe.

"We started switching to nylon cord tires in the spring of 1953," says Mr. Howell, "and plan to complete the change-over among our 42 tire banks as soon as possible."

PROVE TO YOURSELF that nylon's advantages lead to lower tire costs, whatever road and load conditions are. Du Pont makes the tough nylon that goes into the tire. You can get long-lasting nylon tires under any brand name. Ask your dealer to tell you about nylon cord tires.

BETTER THINGS FOR BETTER LIVING
...THROUGH CHEMISTRY



Enjoy the "Du Pont Show of the Month" on CBS-TV

THE SAFEST, STRONGEST TIRES ARE MADE WITH

NYLON

COMMERCIAL CAR JOURNAL, April, 1958

305

Maintenance Films

Continued from Page 304

gine, illustrating the operation of each part, and explains how power is transmitted to the rear wheels. Free loan—42.

Professor Otto Trouble—16 min—Animated film on automobile cooling system troubles and proper maintenance practices. Free loan—28.

A Sure Bet—40 min—Shows correct way to install piston rings. Includes some entertaining examples of what not to do when working on an engine. Free loan—31.

Where Mileage Begins—19 min—Animated film describes gasoline engine operation, what happens when gears are shifted. Functions of parts are explained as an engine is assembled. Free loan—17.

Why Engines Are Governed—5 min—Defines relationship between horse-

power and speed, explains purpose of engine governor. Free loan—41.

Fuels and Lubricants

Basic Principles of Lubrication—25 min—Explains basic theory and function of lubrication in the engine using U. S. Army trucks as examples. Shows how it reduces friction, cools moving parts, keeps power in the cylinder and prevents contamination and deterioration. Free loan—17. Rent—25.

For Better Performance—15 min—Color film in cartoon style that illustrates function of gasoline in an engine. Covered in the film are vapor lock, knock, preignition, additives and impurities. Free loan—11.

Fundamentals of Fuel Knock—27 min—Shows why fuel knock occurs, tells how to eliminate audible knock in combustion engines. Free loan—11.

It's Mighty Cheap Insurance—30 min—Color film on the reasons for and the advantages of regular oil change. Shows how engine is lubricated. Free loan—39.

Lubrication—30 min—Describes theory of friction and application of lubricants in a vehicle. Free loan—42.

Oil Films in Action—18 min—Technical film in color for engineers showing effect of oil film in bearing life. Free loan—17.

Slow Motion Study of Fuel Injection and Combustion in a Diesel Engine—33 min—Silent, advanced technical film on diesel engine fuel injection and combustion. Free loan—26.

Slow Motion Study of Normal Combustion, Preignition and Knock in a Spark Ignition Engine—33 min—Silent, advanced technical film on gasoline engine combustion. Free loan—26.

A Study of Combustion in a Spark Ignition Engine—17 min—Shorter version of the above film. Also silent. Free loan—26.

Thanks to the Atom—25 min—Tells how radioactive piston rings were used in motor oil development. Interesting for the data shown about piston ring lubrication function. Free loan—37.

The Why of Automobile Lubrication—24 min—Color film on why lubrication is necessary. Free loan—42.

(TURN TO PAGE 310, PLEASE)

Get more MILES PER DOLLAR with CAMSHAFT GRINDING



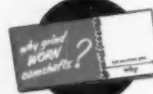
Today, no fleet engine overhaul—gasoline or Diesel—is complete without regrounding the camshaft. Camshaft grinding restores original power, increases the life of every rebuilt engine, and reduces fuel consumption. And, a Van Norman Camshaft Grinder will reground most camshafts for half the cost of a new shaft!

You can put this money-saving machine in your Shop—or, have your camshafts reground at a Van Norman equipped Jobber's Shop. Write for all the details—how you can own a Van Norman Camshaft Grinder for just a few dollars a day on the easy "Pay-As-You-Depreciate Plan"—or, request the name and address of a nearby Jobber who is qualified to supply this Van Norman PRECISION MACHINING for you. Van Norman Automotive Equipment Company, Division of Van Norman Industries, Inc., Springfield 7, Mass.

**No. 253
Camshaft Grinder**
(Grinds camshafts up to 52" long; and up to 84" with a table extension)

Write:

for this informative booklet about Camshaft Grinding. It's FREE . . . send for it NOW!



VAN NORMAN

PRECISION
VAN NORMAN IN MODERN, EFFICIENT SHOPS—EVERYWHERE!
MACHINING



WEAVER HEAVY DUTY LIFTS

handle all wheelbase lengths
without loss of lifting capacity

You'll find that Weaver Lifts provide the answer for every weight and wheelbase requirement of every vehicle in your fleet. These lifts raise vehicles by the axles, thus giving mechanics free, unobstructed access to every under-chassis point. There are no rails in the way. Such working efficiency speeds shop production from 25% to 100%.

The Weaver Twin Post Lift and the Weaver Triple Post Lift (shown above in the same shop) are the *only* automotive type lifts that can handle various wheelbase lengths without loss of lifting capacity.

Heavy Duty Twin Post Lifts are regularly furnished with a wheelbase capacity of 102" mini-

mum and 204" maximum unless otherwise specified. Wheelbase extensions are available to take from 36" minimum up to 306" maximum — or greater, on special order.

MODEL EC-105 TWIN POST LIFT is air-oil operated, and has a total capacity of 24,000 lbs.

MODEL EC-106 TWIN POST LIFT is electric operated, and has a total capacity of 36,000 lbs.

MODEL EC-106-3 TRIPLE POST LIFT is electric-oil operated, and has a total lifting capacity of 54,000 lbs.

For further details, see your Weaver jobber, or write us for Bulletin CCJ-457.



WEAVER MANUFACTURING COMPANY, SPRINGFIELD, ILL., U. S. A.

SERVICE SHOP EQUIPMENT

Complete line includes: Twin Post Lifts . . . Triple Post Lifts . . . Single Post Roll-on, Free-Wheel and Frame Type Lifts . . . Unit Lifts . . . Bumper Lift . . . Car Washers . . . Wheel Alignment Equipment . . . Headlight Testers . . . Brake Testers . . . Wheel Balancing Equipment . . . Jacks . . . Wheel Dollies . . . and Air Compressors.

Champion "know-how" can give you top spark

EXCLUSIVE TECHNICAL HELP

When you buy Champions you get more than the world's finest spark plugs. You also get the assurance of top ignition performance in every truck engine. That's because Champion offers you the experience and know-how accumulated by the world's largest research and engineering organization devoted exclusively to spark plugs. If necessary, a Champion representative will team up with a Champion Field Engineer and put Champion's know-how to work improving your fleet's ignition performance. Call on them for help.

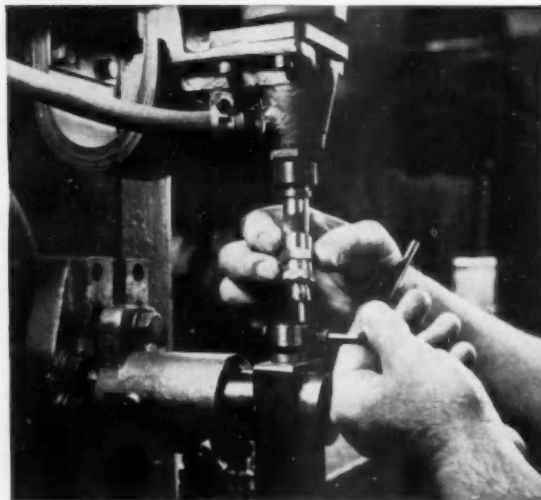


Gene Kinard, Champion Representative (left), and Dick Gail, Champion Field Engineer (center), work with Robert J. Lingo, Maintenance Foreman of Florida's Pasco Packing Company.



MAXIMUM LIFE

Champion know-how gives your fleet the advantage of the longest possible spark plug life—even under such severe operating conditions as these. Champion's Powerfire electrodes last far longer than ordinary plugs under heavy hauling conditions that soon put combustion chamber temperatures up into the critical ranges.



SPECIFIC ENGINE DESIGN

Here "pilot models" of a new Champion design are carefully assembled by experts. These are then thoroughly tested to be sure they meet every requirement of the engines for which they were designed. This is one of many steps that Champion takes to design spark plugs that will deliver top performance (under all operating conditions) in every truck engine.

plug performance in every truck engine



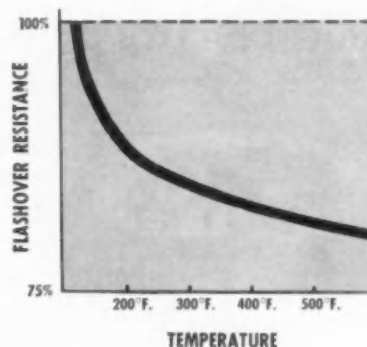
SPECIAL APPLICATION PLUGS

Stop-and-go driving like this frequently fouls ordinary spark plugs. Champion know-how met this situation by producing the auxiliary-gap, which reduces excessive fouling—keeps engines firing smoothly far longer than ordinary plugs. Ask your Champion representative for further details and get top spark plug performance in every truck engine.

Champion Service Tips for better truck performance

FLASHOVER AND TEMPERATURE

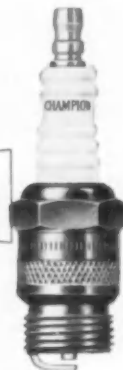
The additional flashover protection offered by Champion's five-ribbed insulator is increasingly important in high-compression engines because of higher levels of ignition voltage. The advantage of this ribbed design becomes even more apparent, however, in installations where the outside of the plug may be heated considerably. As shown in the following data from our Research Department, flashover shorting can become a much more serious problem as temperatures go up.



DEPENDABLE 5-RIB

CHAMPION

SPARK PLUGS



CHAMPION SPARK PLUG COMPANY • TOLEDO 1, OHIO

Maintenance Films

Continued from Page 306

Tools and Procedures

The ABC of Hand Tools, Part 1—18 min—Animated, color film shows how to handle such tools as hammers, screwdrivers, pliers and wrenches. Free loan—17.

The ABC of Hand Tools, Part 2—15 min—Animated, color film shows

how to handle such tools as files, saws, chisels, planes, drills and punches. Free loan—17.

Add Power to Your Hands—20 min—Shows the "power" added through proper use of correct tools. Free loan—43.

Curve Control—8 min—Explains operation of various types of steering mechanisms. Rent—22.

For Safety's Sake—15 min—Demonstrates safe use of power-driven, hand tools. Rent—29, 34.

FWD Story—25 min—Color film showing principle and operation of Four Wheel Drive trucks. Free loan—14.

Grinding Cutter Bits—20 min—Color film shows correct way to grind tools for different lathe operations. Free loan—36.

The Grinding Wheel, Its Care and Use—17 min—Color film shows care and precautions necessary for efficient use of grinding wheels. Gives correct dressing procedures. Free loan—30.

Grinding Wheel Safety—20 min—Color film covers principal causes of grinding wheel breakage. Discusses selection of grinding wheels. Free loan—30.

How to Form Aluminum, General Sheet Metal Practice—20 min—Bending, hammering, beading, flanging, edging and otherwise forming sheet aluminum, both manually and mechanically, is covered in this film dealing largely with industrial procedures. Free loan—3.

How to Machine Aluminum—32 min—Outlines practices employed in machining aluminum with hand and machine tools. Free loan—3, 42.

How to Rivet Aluminum—27 min—Explains procedures and techniques in riveting aluminum. Selection of various types of rivets is also included. Free loan—42.

Keep Them Rolling—8 min—Describes use of air-powered impact wrenches, hydraulic truck jacks and body repair tools in fleet maintenance. Free loan—6.

Making the Most of the Spray Painting Method—45 min—Illustrates the four basic principles of spray painting—proper equipment, control factors for high quality results, painting technique and equipment care, cleaning and maintenance. Free loan—9.

The Metalworking Lathe—20 min—Color film on basic metalworking lathe operation. Function of each part is described. Free loan—36.

Plain Turning—20 min—Color film illustrates all operations necessary in machining a shaft. Free loan—36.

Pliers—Their Use and Care—20 min—Illustrates proper use and care of pliers. Free loan—43.

(TURN TO PAGE 314, PLEASE)



INCREASE GAS MILEAGE

REDUCE TRUCK MAINTENANCE

LENGTHEN TIRE LIFE

GUARD AGAINST ACCIDENTS

By Equipping Your Fleet with
HANDY GOVERNORS



7616

KS
KING-SEELEY CORPORATION
ANN ARBOR, MICHIGAN

WORLD'S LARGEST MANUFACTURER OF AUTOMOTIVE GOVERNORS

DT'S GET YOU DOWN



It's Down Time that Costs You Money!

R_x
*Prescription
Filtration*



Engineered to provide prescription type Cartridges for your engines and operating conditions. Maximum dirt retention of even microscopic particles gives longer replacement interval and higher service efficiency.

Down time ups your maintenance costs and kills your profits when vehicles are sidelined for repairs.

Damaging dirt, grit, and gummy sludge in motor oil is a big factor in Fleet vehicle D. T.'s. WIX HEVI-DUTY Oil Filter Cartridges keep motor oil clean—keep these harmful contaminants out—keep your units on the road—LONGER! There's a WIX Cartridge expressly engineered for every filter equipped gas or Diesel engine on all trucks, buses, passenger cars and other equipment.

You'll find WIX Engineered Filtration sharing the responsibility for many profitable Fleet operations. Ask for a FREE Survey of your complete filter requirements, and an Inventory Control Record for your Fleet. Call your local WIX Jobber, or write us direct.

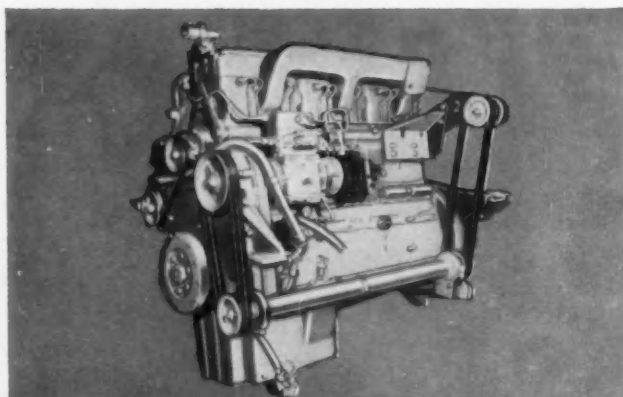
wix

OIL FILTERS AIR FILTERS
AUTOMOTIVE • INDUSTRIAL • RAILROAD
WIX CORPORATION • GASTONIA • N. C.

In Canada: Wix Corporation, Ltd., Toronto

King of the Highway...

THE NEW **White** 3400



NO OTHER DIESEL ENGINE WILL MATCH ITS LIFE, ITS SUPERIOR PERFORMANCE, FUEL ECONOMY AND LOW MAINTENANCE COST

- **Top Fuel Economy**—matches or betters the fuel economy of any other diesel
- **Proved 4-valve cylinder heads** for better breathing and higher power output with low exhaust temperatures
- **Long Engine Life**—new life after overhaul with wet-type replaceable cylinder sleeves
- **Low Maintenance Cost**—minimum downtime
- **Optional Engines** in this new White 3400TD are the heavy-duty HREB and NH-220 Diesels.

The White 3400TD is available in Single-Axle, Tandem and Pusher Model Tractors Engineered to your exact operating conditions.

Diesel at its economical best in the COE tractor that sets the industry standard for functional design—the White 3400TD Series with the BIG NH-180 diesel engine.

Top earning power because this great new White accommodates 40 ft. trailers within 50 ft. over-all length, even with a sleeper cab. Exceptional weight distribution, too, with the drive axle weight 700 lb. lighter than other COE's.

Incomparable White 3000 power-tilt cab adds life, cuts maintenance cost. Its wonderful ride, driving ease, visibility and safety are unmatched... nothing like it!

Add to all these proved and exclusive advantages new, efficient power with the big NH-180



AMERICA'S MOST ADVANCED—

TD SERIES

diesel. Plus a cooling system with higher cooling standards than in any other diesel... 250 sq. in. additional radiator cooling capacity.

And, typical of White customer-design, this King of the Highway Diesel—like its conventional counterpart—the 4400TD—is engineered to your exact work requirements.

More than ever, your profitable choice in highway diesel power—The King of the Highway!

THE WHITE MOTOR COMPANY
Cleveland 1, Ohio



MOST COMPLETE DIESEL LINE

COMMERCIAL CAR JOURNAL, April, 1958

313

Maintenance Films

Continued from Page 310

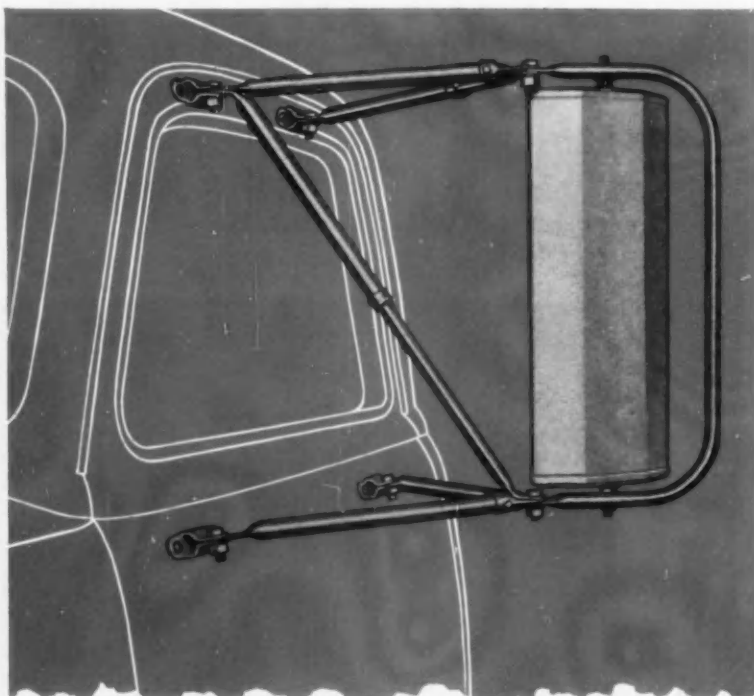
Pulling for Profits—20 min—Demonstrates basic fundamentals of the NoSPIN differential. Shows how it operates. Free loan—8.

School Bus Operation, Part 1, Bus Care and Maintenance—13 min—Outlines points to be checked in daily and weekly maintenance of school buses.

Free loan—13. Rent—19, 23, 25, 27, 38.

School Bus Safety—18 min—Discusses maintenance and operational procedures for school buses. Includes material on transporting school children safely. Rent—18, 44.

Simply Awful or Awfully Simple—20 min—Color film demonstrates mounting and demounting of tubeless tires including new 14 and 15-in. rims. Free loan—48.



NEW! TRU-VUE MIRRORS



An eye-revealing, eye-appealing mirror at a truly amazing low price. A price so low you just can't afford to overlook it. This new Anthes unit has the latest improvements in mirror design. And it is big, rugged. Available in many different mounting combinations for either side of cab. Be sure to see the new Anthes Tru-Vue Mirror before you buy. The Anthes Co., Fort Madison, Iowa.

Anthes THE FIRST LINE OF SAFETY

*flags • flares • fusees • lights • mirrors
reflectors • fire extinguishers*

The Truck That Tips Its Cab to Service—30 min—Describes how the White tilt cab operates. Free loan—47.

Use and Care of Hacksaws—18 min—Shows proper use and care of hacksaws, and accident hazards to be avoided in their use. Free loan—33. Rent—29.

Use and Care of Hammers—11 min—Shows proper use and care of hammers, and accident hazards to be avoided in their use. Free loan—33. Rent—29.

Use and Care of Chisels—12 min—Shows proper use and care of chisels, and accident hazards to be avoided in their use. Free loan—33. Rent—29.

Use and Care of Pliers and Screwdrivers—17 min—Shows proper use and care of pliers and screwdrivers, and accident hazards to be avoided in their use. Free loan—33. Rent—29.

Use and Care of Punches, Drifts and Bars—14 min—Shows proper use and care of punches, drifts and bars, and accident hazards to be avoided in their use. Free loan—33. Rent—29.

Use and Care of Wrenches—20 min—Shows proper use and care of wrenches, and accident hazards to be avoided in their use. Free loan—33. Rent—29.

Welding Techniques

Advanced Welding Techniques—10 min—Shows selection of electrodes for AC welding. Demonstrates practical aspects of welding techniques. Free loan—46.

Advantages of AC Welding—19 min—Easy to understand presentations in color of principles and applications of AC welding of iron and steel. Free loan—46.

Arc Welding Aluminum—10 min—Explains techniques for metal, carbon and hydrogen arc welding of aluminum. Free loan—3, 42.

Arc Welding Stainless Steel—20 min—Explains technique for electric arc welding of stainless steel. Free loan—1.

How to Weld Aluminum, Resistance Welding—12 min—Explains technique of resistance welding aluminum. Free loan—3, 42.

(TURN TO PAGE 316, PLEASE)

as **LIGHT** as aluminum
— **WEARS** like iron

Unretouched photo of VANASIL piston

MICRO-X VANASIL pistons have run way over 200,000 miles with only .002" to .005" wear on the top ring grooves. How much wear develops in top ring grooves on the pistons you are using—in 100,000 miles? In 200,000 miles, if they are ever run that far?

Do your owners have rings break because of badly worn grooves, causing a breakdown on the road and a costly tow-in job as well as lost time and an engine overhaul? *Vanasil Pistons reduce top ring groove wear up to 75%!*

You Get ALL these Advantages only in

VANASIL PISTONS

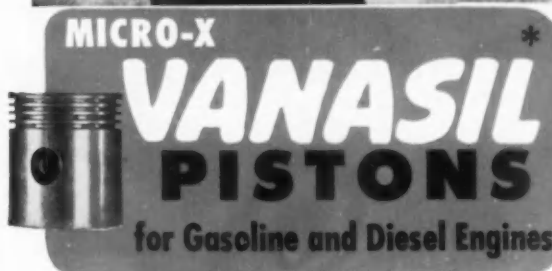
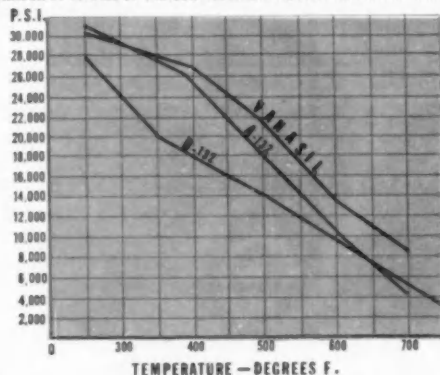
G&E Vanadium — Silicon — Aluminum Alloy

1. **LIGHT WEIGHT**—Same as other aluminum alloys.
2. **SCORING, SCUFFING MINIMIZED**—Because of "Oil-absorbing" microscopic porous texture.
3. **LONGER LIFE** — 30% less friction — 30% harder, outwears other aluminum alloys several times.
4. **TOP RING**—Breakage virtually eliminated because of reduced ring groove wear.
5. **LOW EXPANSION**—Characteristics of Cast Iron.
6. **CLOSE CLEARANCES**—Fitted with Cast Iron Clearances.
7. **SOLID SKIRT DESIGN**—No expansion devices required.
8. **HIGH HEAT CONDUCTIVITY**—Similar to other aluminum alloys.
9. **GRAIN GROWTH**—None.
10. **PLATING**—No tin or other break-in coating required.

VANASIL Piston Warehouse Stocks:

CALIFORNIA—Automotive & Industrial Whse. Co., 1341 So. Hope St., Los Angeles 15
Piston Supply Warehouse, 2768 Grove St., Oakland 12
FLORIDA—H & M Parts Warehouse, 1086 W. Adams St., Jacksonville
NEW YORK—Bethlehem Equipment Co., 109 W. 64th St., New York 23

A COMPARISON OF TENSILE OF VARIOUS ALUMINUM ALLOYS AT ELEVATED TEMPERATURES



*Gillett & Eaton's trademark for a vanadium-high silicon-aluminum alloy.

GILLETT & EATON, INC. • Est. 1868
802 DOUGHTY ST., LAKE CITY MINNESOTA

SEND COUPON

GILLETT & EATON, INC.
802 Doughty St., Lake City, Minn.

Please send circular and prices on Vanasil Pistons in over 60 types and sizes for gasoline and diesel engines.



Our equipment is.....

Name.....

Firm Name.....

Address.....

There's a

SPEED WASH

FOUNTAIN BRUSH

to fit every
washing need

**FOR LARGE TRUCKS
and BUSES**

No. 240 Oblong—
11" back, full
60" handle



**FOR SMALL TRUCKS—
PASSENGER
CARS**

No. 250
Round—5½" dia.
back, full 60" handle



More trucks, buses, trains are washed with Speed Wash Fountain Brushes than any other. And no wonder! Look at these features — soft, resilient bristles (50% nylon — 50% horsehair) can't mat, tangle; exclusive perma-set fastened tufts cannot come out; steel back is surrounded by mar-proof rubber bumper. Built to outlast ordinary brushes, Speed Wash is fully guaranteed. Order yours today!

MILWAUKEE DUSTLESS BRUSH CO.

530 North 22nd St., Milwaukee, Wis.

Please ship the following:

Quan.	No.	Item
	240	OBLONG SPEEDWASH
	250	ROUND SPEEDWASH

NAME
ADDRESS
CITY STATE

Maintenance Films

Continued from Page 314

How to Weld Aluminum, Torch Welding—17 min—Explains technique of torch welding aluminum. Free loan—3.

The Inside of Arc Welding—6 parts, each 10 min—Film No. AS-2481 covers arc welding fundamentals; the other five show fillet and groove welding in flat position—Film No. AS-2482, horizontal position—Film No. AS-2483, vertical position—Film No. AS-2485, overhead position—Film No. AS-2486, and Film No. AS-2484 describes use of larger electrodes. In color. Free loan—16.

New Horizons in Aluminum Brazing—22 min—Color film illustrates advantages of and how to join aluminum parts by brazing. Free loan—3.

New Welding Procedures—19 min—Color film showing step-by-step procedures on welding rod and electrode techniques. Torch and metallic arc welding are shown as well as chamfering, cutting, grooving. Free loan—12.

Prevention and Control of Distortion in Arc Welding—20 min—Explains how to overcome metal distortion in arc welding. Free loan—24.

Resistance Welding of Stainless Steel—22 min—Color film describes spot, seam, projection and butt resistance welding of stainless steel. Free loan—1.

Safety for Welders—7 min—Illustrates protective clothing and equipment for welders to prevent eye injuries and metal fume poisoning. Rent—21, 32.

A Story of Arc Welding—24 min—Color film on various uses, techniques and theory of arc welding. Many automotive scenes are included. Free loan—42.

This Is Resistance Welding—25 min—Color film describing resistance welding techniques. Ask for Film No. AS-2583. Free loan—16.

Welding, the Safe Way—18 min—Training film for new welders illustrates safe working conditions for most welding operations. Rent—29.

(TURN TO PAGE 318, PLEASE)

The Only Safe Way



TO CHANGE TUBELESS TIRES

on Light-Duty Vehicles

Tire manufacturers' recommendations must be followed when mounting and demounting 14" and 15" tubeless tires on small commercial trucks and other light-duty fleet vehicles. These include the use of an approved lubricant.

RuGLYDE is THE approved tire lubricant—the only rubber lubricant that speeds and simplifies tire changing without endangering the air seal, rubber or paint finish in any way! RuGLYDE permits perfect bead seating—prevents "after-slippage" and tire "thumping"—and will not induce rust.

and Large Heavy-Duty Trucks

The need for RuGLYDE for larger truck tubeless tires is even more urgent. Applied to bead and rim, RuGLYDE eases the difficult job of seating the tighter and heavier bead on the tapered rim . . . prevents scuffing . . . protects the air seal. A "must", too, for tube and flap assembly.

RuGLYDE is also an ideal "cleaner" for making tires and rubber accessories look new. Use on lube-rack, too. Its deep penetrating action makes it unexcelled for squeak-proofing rubber parts and fittings.

See your jobber or write



R-338

**AMERICAN GREASE STICK COMPANY
MUSKOGON, MICHIGAN**

COMMERCIAL CAR JOURNAL, April, 1958

**If it runs on fuel...
there's a FRAM filter for it**



FRAM KEEPS YOUR FLEET

ON THE ROAD WITH

"FULL-FILTRATION"

Engine trouble due to corrosion, sludge and abrasive dirt and dust can raise havoc with tight fleet schedules. FRAM Filters, designed to original manufacturers' specifications, keep your engines clean, help prevent costly delays. FRAM "Full-Filtration" increases profits by cutting maintenance and repair costs and adds extra mileage between oil changes and engine overhauls. FRAM "Full-Filtration" helps keep your fleet where the payload pays off! Check with your FRAM Supplier today.

FRAM Corp., Providence 16, R. I. • FRAM Canada Ltd., Stratford, Ont.

FRAM
OIL • AIR • FUEL • WATER
FILTERS

Maintenance Films

Continued from Page 316

SOURCE LIST

NUMBERS refer to the numbers at the end of the description of each film. Where more than one source is given, write to the closest address.

1. Allegheny-Ludlum Steel Corp.
2020 Oliver Bldg.
Pittsburgh 22, Pa.

2. Allis-Chalmers Mfg. Co.
Adv. and Industrial Press Dept.
Milwaukee 1, Wis.
3. Aluminum Co. of America
Motion Picture Section
854 Alcoa Bldg.
Pittsburgh 19, Pa.
4. Bendix Westinghouse Automotive
Air Brake Co.
901 Cleveland Rd.
Elyria, Ohio
5. Champion Spark Plug Co.

Sales Dept.
Toledo 1, Ohio

6. Chicago Pneumatic Tool Co.
Advertising Dept.
6 East 44th St.
New York 17, N. Y.
7. Continental Motors Corp.
Att.: Howard Johnson
205 Market St.
Muskegon, Mich.
8. Detroit Automotive Products Corp.
8701 Grinnel Ave.
Detroit 13, Mich.
9. DeVilbiss Co.
300 Phillips Ave.
Toledo 1, Ohio
10. Electric Auto-Lite Co.
Advertising Dept.
Toledo 4, Ohio
11. Ethyl Corp.
Chief Automotive Engineer

100 Park Ave.
New York 17, N. Y.

310 South Michigan Ave.
Chicago 4, Ill.

National Bank of Tulsa Bldg
Tulsa 3, Okla.

1141 Huntley Drive
Los Angeles 26, Cal.
12. Eutectic Welding Alloys Corp
40-40 172nd St.
Flushing 58, N. Y.
13. Nationwide Mutual Insurance Co.
Safety Dept.
246 North High St.
Columbus 16, Ohio
14. The Four Wheel Drive Auto Co.
Clintonville, Wis.
15. Fuller Mfg. Co.
Transmission Div.
Service Sales Dept.
Kalamazoo, Mich.
Contact local White Motor Co.,
GMC Truck & Coach Division
International Harvester Co. or
Diamond T Motor Car Co. branch
16. General Electric Co.
Adv. and Sales Prom. Div.
Distribution Section
Schenectady 5, N. Y.
17. General Motors Corp.
Dept. of Public Relations
Film Section
(TURN TO PAGE 320, PLEASE)

It pays to recognize
proven performance



the only FACE-TYPE Oil Seal for Truck and Trailer Axles

Had enough of costly wheel bearing road calls? Constant wheel packs? Fuel-thirsty wheel drag? Switch to MECHANEX on all your new and old equipment and cash in on real savings! Only oil gives constant, perfect bearing lubrication — MECHANEX seals stretch bearing life up to six times with proven, exclusive FACE-TYPE design!

Available on ALL makes
of new trailers — and
at Trailer Branches and
leading Parts Suppliers.



THE
mechanex CORPORATION
1144 BROADWAY DENVER, COLORADO

RUGGED

TURNPIKE TESTS PROVE



SILVERTIP BRAKE BLOCKS

Last Longer, Reduce Drum Wear

Depend on Silvertip where roads and loads put an extra strain on brakes. Road tests under all conditions prove that you get safer all-weather stops and over 25% additional mileage with Silvertip Heavy-Duty Brake Blocks. Silvertip Brake Blocks are water-proof, glaze-proof, heat and fade-resistant. Precision molding of Silvertip's special heat dissipating

compound reduces downtime required for servicing scored and heat-checked drums. Silvertip wears evenly, doesn't develop "hot spots" that can cause fast deterioration. Look at it from any angle . . . increased safety and mileage . . . decreased maintenance and downtime . . . it pays to buy Silvertip Heavy-Duty Brake Blocks!

CONTACT YOUR GRIZZLY DISTRIBUTOR TODAY!

BEAR IN MIND . . . ASK FOR

GRIZZLY SILVERTIP BRAKE BLOCKS



GRIZZLY MANUFACTURING DIVISION

PAULDING, OHIO



Maintenance Films

Continued from Page 318

New York and Long Island
1775 Broadway
New York 19, N. Y.

Eastern States
General Motors Bldg.
Detroit 2, Mich.

Western States
508 San Francisco Bank Bldg.

405 Montgomery St.
San Francisco 4, Cal.

18. Univ. of Illinois
Audio-Visual Aids Service
Div. of Univ. Extension
Champaign, Ill.

19. Indiana Univ.
Audio-Visual Center
Div. of Adult Education
1804 East 10th St.
Bloomington, Ind.

20. International Harvester Co., Inc

180 North Michigan Ave.
Chicago 1, Ill.

21. State Univ. of Iowa
Bureau of Audi-Visual Inst.
Extension Div.
Iowa City, Iowa

22. The Jam Handy Organization
2821 East Grand Blvd.
Detroit 11, Mich.

23. Univ. of Kansas
Bureau of Visual Instruction
Lawrence, Kan.

24. The Lincoln Electric Co.
12818 Coit Rd.
Cleveland 1, Ohio

25. Michigan State University
Audio-Visual Center
East Lansing, Mich.

26. National Advisory Committee for
Aeronautics
1724 F St., N. W.
Washington 25, D. C.

27. National Board of Fire Under-
writers
Film Library

East of Rocky Mts.
Bureau of Communication Re-
search
13 East 37th St.
New York 17, N. Y.

West of Rocky Mts.
Merchants Exchange
San Francisco 4, Cal.

28. National Carbon Co.
Div. of Union Carbide and Chemi-
cal Corp.
30 East 42nd St.
New York 17, N. Y.

29. National Safety Council
Film Bureau
425 North Michigan Ave.
Chicago 11, Ill.

30. Norton Co.
Publicity Dept.
Worcester, Mass.

31. Perfect Circle Corp.
School Assistance Dept.
Hagerstown, Ind.

32. Princeton Film Center
Princeton, N. J.

33. Proto Tool Co.
2209 Santa Fe Ave.
Los Angeles 54, Cal.

(TURN TO PAGE 322, PLEASE)



The new Coldmobile "Cross-Country" Model TN-320 for semi-trailers—one of the many outstanding new Coldmobile models for new reliability, low-cost use, and long life.

New Performance • New Simplicity • New Appearance

From Coldmobile—pioneer of the all-electric unit, originator of the two-compressor system, perfecter of hydraulic-power operation—now comes a fresh, new concept of efficient performance and accessible, modern styling . . . a whole array of brilliant new models for dependable truck and trailer refrigeration.

You'll Cut Costs With Coldmobile

For city deliveries or over-the-road—on every type of service—Coldmobile progress brings you the finest in trouble-free, weight-saving equipment. Just tell us what you want to haul and how you want to haul it. Seldom before has so much that is new meant so much in money-savings for you. Phone or write today.



Specialists in the Protection of Perishables

Coldmobile

DIVISION OF UNION ASBESTOS & RUBBER COMPANY

2900 W. Vermont Street, Blue Island, Illinois. Chicago Phone: INterocan 8-7272



Rent Hertz trucks for peak periods!

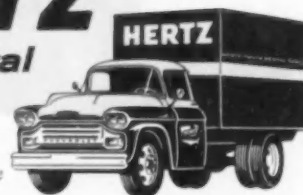
Your deliveries get on the road on time with The Hertz Idea

Whenever peak periods threaten to K.O. your delivery schedule, call Hertz. You'll get a clean, modern Chevrolet or other sturdy truck in a hurry! All your driver needs to take the wheel are a proper driver's license and identification. Low rates—by the hour, day or longer. In Kansas City, Missouri, for instance, a 2-ton van truck costs only \$8.50 for 24 hours, plus 11 cents a mile, including all gasoline, oil and proper insurance. Rates vary slightly in different cities. Good idea: keep the telephone number of your local Hertz office handy! It's listed under "Hertz" in your alphabetical phone book. Hertz Truck Rental, 218 South Wabash Avenue, Chicago 4, Illinois.

Most experienced...by far

HERTZ

Truck rental



*Listen to Hertz Business and
World News featuring Walter Cronkite
every day on CBS Radio*

Maintenance Films

Continued from Page 320

34. Sarra, Inc.
16 East Ontario St.
Chicago 11, Ill.

35. Shell Oil Co.
Film Library, Room 4226
50 West 50th St.
New York 20, N. Y.

36. South Bend Lathe Works

425 East Madison St.
South Bend 22, Ind.

37. Standard Oil Co. of Cal.
Marketing Dept., Lubricant Div.
Standard Oil Bldg.
San Francisco 20, Cal.

38. Univ. of Tennessee
Div. of Univ. Extension
Univ. Film Library
Knoxville, Tenn.

39. The Texas Co.
Public Relations Dept.

135 East 42nd St.
New York 17, N. Y.

40. Raybestos Division
Raybestos-Manhattan, Inc.
P. O. Box 1021
Bridgeport, Conn.

41. U. S. Army
Signal Officer

First Army
Governors Island
New York 4, N. Y.

Second Army
Fort Meade, Md.

Third Army
Fort McPherson, Ga.

Fourth Army
Fort Sam Houston, Texas

Fifth Army
1660 East Hyde Park Blvd.
Chicago, Ill.

Sixth Army
Presidio of San Francisco
San Francisco, Cal.

Military District of Washington
Washington 25, D. C.

42. U. S. Bureau of Mines
Graphic Services Station
4800 Forbes St.
Pittsburgh 13, Pa.

43. Utica Drop Forge & Tool Co.
Utica 4, N. Y.

44. Commonwealth of Virginia
State Board of Education
Film Production Service
Richmond 16, Va.

45. Wagner Electric Corp.
6400 Plymouth Ave.
St. Louis 14, Mo.
Or contact local factory Branch

46. Westinghouse Electric Corp.
Film Div.
Box 868, 511 Wood St.
Pittsburgh 30, Pa.

47. The White Motor Co.
Sales Promotion Dept.
842 East 79th St.
Cleveland 1, Ohio

48. American Grease Stick Co.
Muskegon, Mich.

FLEET MAINTENANCE COSTS TOO HIGH?



KAL-TUNEMASTER

CUTS COSTS

3

WAYS!

**1 COST LESS
TO BUY...**

the original low cost portable tune-up testers that save hundreds of dollars in initial cost.

2 SAVES TIME...

tools built for the mechanic do every job faster, with full accuracy . . . requires no training course.

**3 REDUCES MAJOR
REPAIR EXPENSE...**

Preventive maintenance becomes economically practical when it's easily done . . . and Kal-Tools make the BIG difference.

**THE TUNE-UP TOOLS THAT ARE USED
... NOT JUST BOUGHT!**



Get them from
your Jobber!

KAL-EQUIP COMPANY

KALAMAZOO, MICHIGAN

new team!
in LP-Gas
Carburetion...



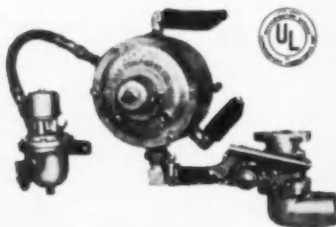
CENTURY

Marvel-Schebler

Follow the lead of 10 big manufacturers who changed to Century LP-Gas carburetion.

Century leadership is evidenced by the fact that 10 manufacturers are now installing Century LP-Gas carburetion as factory standard.

The big difference in Century carburetors is the metering valve which gives positive control of the gas regardless of changes in altitude, temperature or gas pressure. Century progressive jet carburetors are factory calibrated and set to the engine's performance curve. They provide easy starting, perfect idling and full power. They are available for every engine from 5 to 500 h.p.



Leader among Leaders!

A new champion in LP-Gas carburetion was born when Century joined Marvel-Schebler. Here is a combination of an outstanding carburetor design and a dependable factory carburetor service ready to furnish a balanced carburetion system exactly to your engine requirements.

Century now has the complete research and development facilities to build an LP-Gas carburetion system exactly suited to your engines. Each unit balanced in size and capacity. Each carburetor is factory calibrated and set to engine's performance curve. You get the ultimate in engine performance and dependability.



Demand the dependability of a complete Century carburetion system with metering valve control of combustion.

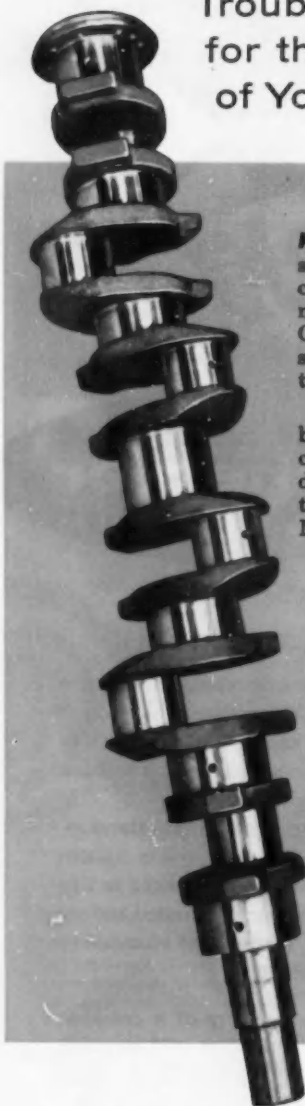
CENTURY
LP-GAS CARBURETION



Century Gas Equipment
Marvel-Schebler Products Division, Borg-Warner Corp.
625 Southside Drive, Decatur, Illinois

morco®

Factory-Certified Exchange Crankshafts give Trouble-Free Operation for the Full Life Cycle of Your Diesel Engine



Morco dealers — coast to coast — are stocked with reconditioned, like-new crankshafts for different diesel engine models. Users of Detroit Diesel and Cummins engines can exchange worn shafts for MORCO factory-reconditioned shafts through authorized dealers.

Why take chances? Let your dealer be your source for dependable, safe crankshaft regrinding. You get immediate service, guaranteed quality and terrific economy. Ask your dealer about MORCO today.

Look what Morco's complete reconditioning service offers you!

Magnaflux—six separate magnaflux inspections with latest equipment.

Ground on production type equipment to engine manufacturer's specifications. Original stroke retained.

TOCCO® Induction Hardened by the original equipment method when necessary.

Rolled Fillets increase strength at the most critical areas.

Dynamic Balance restored on original factory balancing equipment.

Thrust Collars and surfaces repaired.

Gear Fits renewed.

Key Ways restored.

Dowel Holes repaired.

Oil Seal surfaces renewed.

Threads repaired.

*TOCCO is a registered trademark of
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morco

INC.

Bedford, Ohio

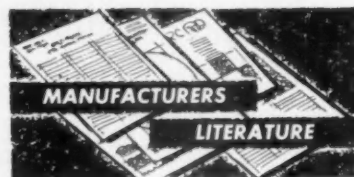
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**The Ohio Crankshaft
Company**

**New
Free
Bulletin**

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COUPON
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22201 Aurora Road, Bedford, Ohio
Please send free copy of "The MORCO Story":

Name _____
Company _____
Address _____
City _____ Zone _____ State _____



Clamps for locking barrels, drums and other cylindrical objects into unit loads are described and illustrated in a color booklet from Drum Clamp Co. Inc., 50 Church St., New York 7, N. Y. Shippers and truckers handling barrel and drum cargos should get a free copy by writing the company.

"Electric vulcanization of tire tubes," free picture folder from the Dill Mfg. Co., 700 East 82nd St., Cleveland 3, Ohio, shows the six main steps to proper vulcanized tube repair. One page is devoted to the replacement of valve stems. The folder can be inserted in your shop manual or used as a reference wall chart.

"Sensimatic Motor Freight Accounting" system is described in Brochure No. S-1080 from the Burroughs Corp., Detroit 32, Mich. The system is a rapid method for obtaining revenue, weight, freight and terminal statistics, with one handling of invoices. The plan is designed to provide all figure information required by a freight line in any breakdown desired.

Service manual for the Bennett Fleet Jr. electric fuel meter recording-type consumer pump is a complete manual and catalog combination for installing, operating and servicing the Bennett Fleet Jr. pump. Drawings and diagrams give complete instructions for operators and service men. For a free copy, write the Service Dept., Bennett Pump Division, John Wood Co., Broadway and Wood Sts., Muskegon, Mich. Ask for Form No. 56-X-106.

Alternator system catalog from the Leece-Neville Co., 1374 East 51st St., Cleveland 3, Ohio, contains pictures and descriptions of a compact size alternator designed for use where limited space is a factor. Complete specifications for the whole system is given.

Automotive finishes for cars, trucks, trailers and buses are described in a color catalog from the Ditzler Color Division, Pittsburgh Plate Glass Co., 8000 West Chicago Ave., Detroit 4, Mich. There are sections on surface preparation, undercoats, thinners, polishers and compounds.

Thompson Micro and CL-77 bearings

outwear regular babbitt bearings

3 to 1

When you find bearings wearing over 3 times longer than conventional tin-base babbitt bearings, there's no question as to their value and desirability . . . for it's performance that counts in bearings —and Thompson Micro and CL-77 bearings give such phenomenal performance.

Both the Thompson Micro and CL-77 bearings have exceptional friction and wear resistance. Here are engineering achievements which not only save money for the owner of an engine, but also make money and good friends for the man who installs them.

For outstanding service, always insist on Thompson Micro or CL-77 bearings.

CL-77



MICRO

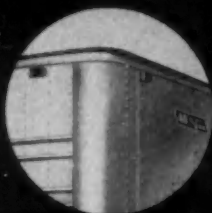
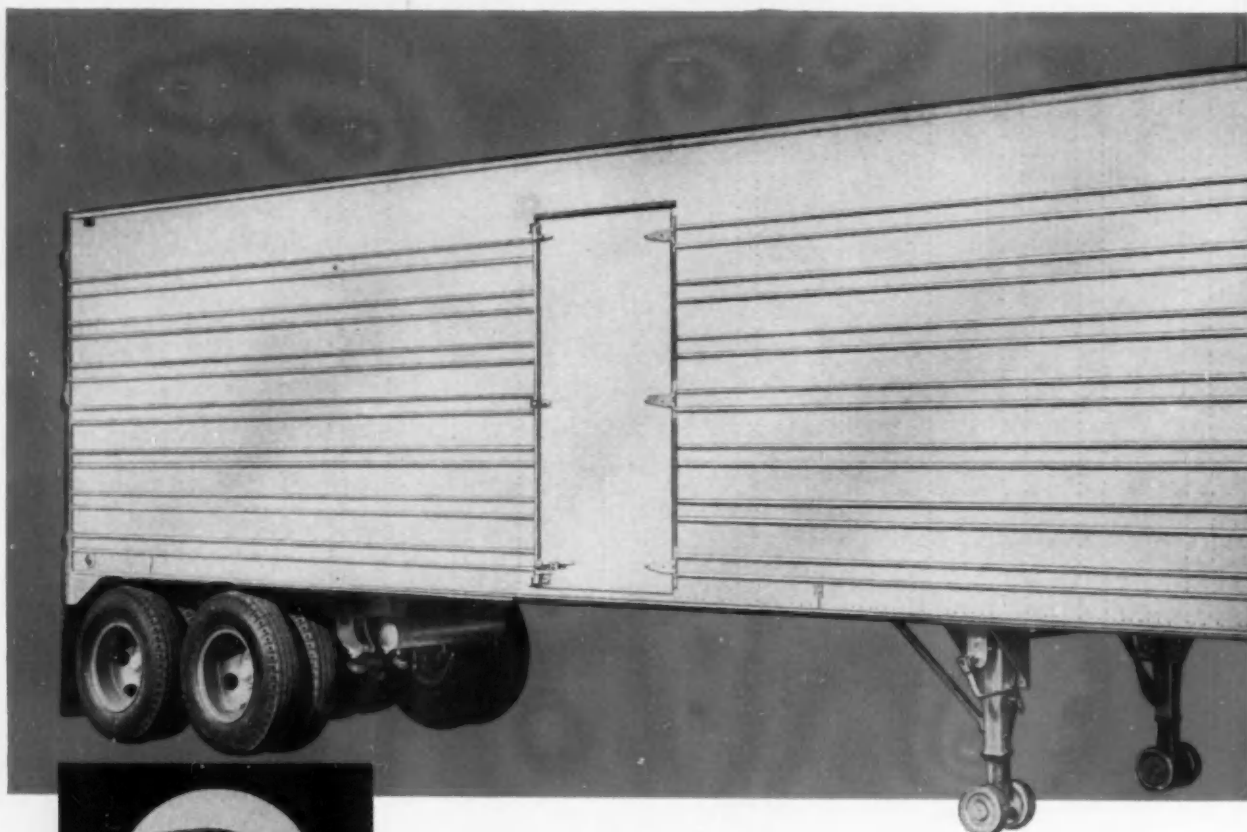


Thompson Engine Bearings for replacement use are exact duplicates of those used by car, bus and tractor builders for original equipment. These bearings include Micro-babbitt, conventional babbitt, copper-lead and CL-77 heavy-duty bearings.



**Thompson
Service Sales**

A DIVISION OF
Thompson Products, Inc.
CLEVELAND 3, OHIO



10" front corner radius provides maximum loading space.



Plywood linings fit neatly between the steel posts.



Regulation, step-type steel bumper is standard.

Economy Mass purchasing by three manufacturers has resulted in lower unit costs on all normal parts. Steel is used strategically for strength, aluminum for beauty and light weight, giving you the most economical, quality composite unit on the road.

Ruggedness Thousands of miles of use under all hauling conditions has proved the 48'er to be as rugged as they come. Steel rear frame, close rivet pattern, rolled steel vertical posts, heavy-duty cross members and other construction features give maximum strength per pound of weight.

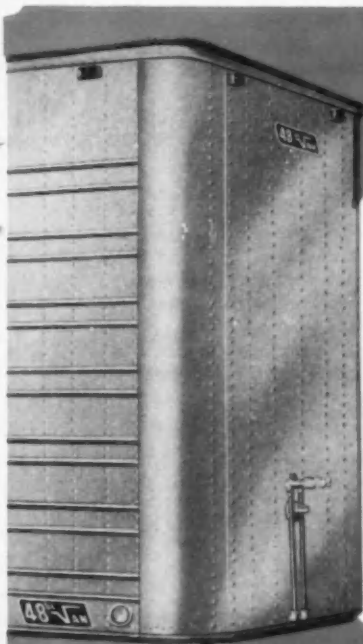
Versatility The 48'er is designed to fit any hauling requirement you have. Straight frame or drop frame, dry cargo or refrigerated, outside skin or outside posts, the 48'er is flexible enough to meet your every specification.



SO OUTSTANDING

Great Dane Trailers

SAVANNAH, GEORGIA



EVERYTHING

You want in a Trailer

THE 48'er VAN

Size Through unique design the plywood lining fits snugly between the rolled steel uprights, with only 1½" of the allowable 96" width being used in each side. With a 90" rear door opening, 93" inside width you will find the 48'er gives you maximum payload capacity. Heights and lengths are optional. 10" front corner radius outside gives you maximum cargo space from the nose right back to the steel bumper.

Service More than eighty distributors cover sixty-four major trucking markets to provide nation-wide sales and service on the 48'er Van. Call on the Utility Trailer, American Trailer or Great Dane Trailer distributor in your area. Get the full 48'er Van story and you'll find you can get more dollars worth of trailer here than anywhere else.

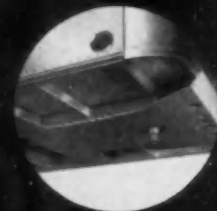
THREE COMPANIES BACK IT!

Utility Trailers
LOS ANGELES, CALIFORNIA

American Trailers
OKLAHOMA CITY, OKLAHOMA



Rear frame assembly is strong, welded, heavy-gauge steel.



Wide skid plate and long 5th wheel plate add strength.



Cross members and side rails are welded for strength.

Safety Films for Truck and Bus Fleets

FILMS IN this list are designed to either prevent traffic and shop accidents or tell what to do when an accident happens.

The films in the list have been especially selected for their direct application to bus and truck fleet employee training. Additional information on more general traffic safety films is available from the editors.

For your convenience, films in this section are arranged as follows:

Subject	Begins on page
Driver Training, General	328
Driver Training, Bus	332
Driver Training, Truck	332
Fire Prevention & Control	336
First Aid	336
Shop & Dock Safety	338



MUSTANG Replacement **ENGINES**

they cut costs for
FLEET OWNERS
Everywhere!

Thousands of fleet-owned cars and trucks are now rolling up millions of highway miles with dependable, economical **MUSTANG REPLACEMENT ENGINES**.

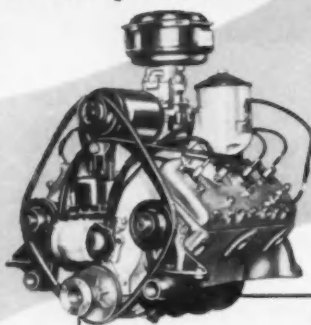
Wouldn't you know there must be good reasons aplenty why the Automotive Division of The Saturday Evening POST recommends this great engine to millions of car and truck owners.



No other Replacement Engine enjoys such high rating—no other Replacement Engine is so carefully built with quality parts and precision engineering.

One day installation, longer engine life, more power, lower operating costs, written nation-wide guarantee . . . these are all **MUSTANG** benefits which let you **REPOWER YOUR FLEET** . . . cheaper, faster, better. Get the facts!

Find out how economical, efficient **MUSTANG** saves time, work and money for **YOUR FLEET**.



- 10% greater power.
- Up to 200 new parts used.
- Every engine factory tested.

MUSTANG is available for all popular makes of cars and trucks. And, **MUSTANG** is extensively used by motor freight lines, bus companies, school busses, dairies, bakeries, public utility companies, delivery companies, government owned vehicles, etc.

Sold by leading jobbers and dealers or write . . .

MUSTANG ENGINES Garland Texas

Most of these films are available for your use without cost—you pay only transportation and insurance. Others carry a nominal rental charge. Because of demand, films should be ordered as far in advance as possible.

All of the films on the list are 16 mm. All are sound films unless otherwise indicated. **Sound films should never be shown in a silent-type projector** as it destroys the sound track. Projectors for showing the films, if not otherwise available, can usually be rented locally at low cost.

Numbers at the end of each film's description refer to the list of sources beginning on page 340.

Driver Training, General

Accident Behavior—20 min—Shows step-by-step procedure of what to do if you're involved in an accident. Rent—22.

Automatic Transmission—10 min—Shows how to drive with automatic transmission for maximum efficiency and safety. Compares it with a manual transmission. Rent—22.

The Champ Becomes Deaf and Blind—10 min—Color film for professional drivers shows why the ability to concentrate on the job of driving, shutting out all distractions, is a big part of professional driving skill. Rent—29.

A Day in Court—29 min—Story of a day in traffic court. Shows how the accidents that come up for hearing happened and what could have been done to prevent them. Free loan—23.

Driving with the Third Eye—10 min—Follows a cab driver through a day in New York City traffic to show how growing fatigue affects his driving. Rent—48.

Don't Skid Yourself—14 min—Produced in cooperation with National Safety Council's Winter Driving Hazards Committee, film illustrates passenger car driving on icy roads and makes suggestions for safer driving. Free loan—1. Rent—22.

Driving at Night—10 min—Fundamentals to apply to obtain maximum nighttime visibility. Rent—22.

The Invisible Killer—15 min—Color film studies the effects of carbon monoxide on the driver. Shows connection between carbon monoxide and accidents. Free loan—38.

(TURN TO PAGE 330, PLEASE)

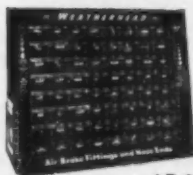
These are Life Lines, Mister

AIR BRAKE HOSE AND FITTINGS HAVE GOT TO BE RIGHT!

Every trucker knows you can't take air brake hose and fittings for granted. Too much depends on their dependable performance.

That's why so many fleet service shops are specifying Weatherhead's line of air brake parts. Every hose is tested to almost double the maximum working pressure. Every hose end and fitting is machined to rigid standards. You can count on safe, reliable performance when you specify Weatherhead air brake fittings, hose and hose ends. Contact your nearby Weatherhead supplier for "right now" service!

Free cabinets with suggested parts assortment now available from a full line of air brake fittings, hose and hose ends.



AB-64



AB-20

Find out how you can get handy air brake component storage bins free. AB-64 for large fleets, AB-20 for smaller service shops.

THE WEATHERHEAD COMPANY
Department CCJ-4

128 West Washington Blvd., Fort Wayne, Indiana

WEATHERHEAD

World's largest manufacturer of tube fittings



Safety Films

Continued from Page 328

Live and Let Live—10 min—Color film using three-dimensional, scale-model animation to demonstrate 10 leading causes of driving accidents. Free loan—1.

Multiple Lane Traffic—16 min—Special film devoted to highlighting

the hazards of multi-lane, limited access, high-speed highways. Rent—33.

Night and Bad Weather Driving—11 min—Basic film on safe driving at night and in bad weather. Free loan—10. Rent—33.

Ninety-Day Flash—10 min—Color film shows how small driving errors made by professional drivers lead to faulty driving habits and inevitably into accidents. Rent—29.

Problems of City Driving—11 min—Basic film on recognition of hazards in driving, in heavy traffic. Free loan—10, 45. Rent—33.

Safety Is No Accident—14 min—Produced by Markel Service, film shows on a regular safety program, systematic vehicle inspection, road checks and driver awards promote fleet safety. Free loan—47.

Safety Pays Dollars—12 min—Color film on safety attitudes and training for cab drivers. Rent—13.

The Search—25 min—Shows Cornell University investigation in use of seat belts, padded instrument panels and vehicle interiors, steering wheel protection as a means of reducing injuries. Rent—49.

Short Stops—10 min—Describes operation of automobile hydraulic brakes and how to use them effectively. Free loan—10.

Skill Is Your Business—10 min—Color film shows what it takes to maintain professional driving skill day after day, year after year and always have it on tap to meet those unexpected situations which often involve unskilled drivers in accidents. Rent—29.

Smooth Operation—16 min—Describes the hazards of the distractions and delays of city driving. Shows how when truck drivers fight traffic, they make driving tougher on themselves. Rent—29.

Speed and Reflexes—11 min—Demonstrates effect of speed in relation to physical laws of motion, human reflexes and reaction time. Effects of fatigue on the drivers are shown. Free loan—42. Rent—33.

Take a Look at the Odds—10 min—Color film tells why the right attitude towards safety by professional drivers is the best insurance against accidents. Shows how the odds are always in favor of the driver who plays it safe. Rent—29.

You Bet Your Life—10 min—Driver training film on road signs, road markings and hand signals. Rent—33.

Watch Your Handicap—10 min—Color film designed to show professional drivers handicaps to safe driving resulting from lack of sleep, im-

(TURN TO AGE 332, PLEASE)

Keep your rolling stock ROLLING

Down-time on your vehicles means loss of service and income... all the more reason to be sure your engines give top performance and long service.



Sunnen Engine Rebuilding Equipment puts vehicles back in service faster... keeps them there longer.

For Pin Fitting: Sunnen Honing Machines have no equal for producing exact clearance or interference pin fits... the work itself is precision gaged to assure factory accuracy.

For Rod Reconditioning: The Sunnen Cap and Rod Grinder grinds the rod parting faces square to the side. The rods are then honed back to their original standard size. This round and true rod bore will guarantee adequate oil pressure and proper heat dissipation—resulting in long bearing life.

Equip your shop with "Sunnen". You will save time and money as many other fleet shops have, throughout the nation.



Write us for literature or a free demonstration right in your own shop.



WORLD LEADER IN HONING ACCURACY

7907 Manchester Avenue
St. Louis 17, Missouri
Canadian Factory: Chatham, Ontario

"Our Tire-Fire tests
sold us on...

Fyr-Fyter Instant's"

says:

Martin Noon

**OF GREAT SOUTHERN
TRUCKING COMPANY**

Member of the Common Carrier Division of Ryder System, Inc.



"We have 1,981 trucks, tractors and trailers to protect," reports Mr. Noon, Safety Director of the southeast's largest motor common carrier. "They rolled up 32,579,721 miles in 1956, but our fire losses were high—four trailers and two tractors.

"Last year Great Southern decided to improve its fire protection. After extensive tire-fire tests conducted by our own personnel under actual road conditions, we chose Fyr-Fyter Instant Loaded Stream extinguishers charged with Karbaloy. No other extinguisher we tested could put out roaring rubber fires in seconds and prevent flashbacks!

"Fire losses were virtually eliminated in 1957. Our Fyr-Fyter representative is giving dependable service on our investment. He's a specialist in fire-fighting, well-qualified to recommend equipment and to test and recharge our extinguishers regularly."

Fyr-Fyter

DIVISION OF THE FYR-FYTER COMPANY
221 CRANE STREET, DAYTON 1, OHIO
Branches: New York, Boston, Philadelphia, Chicago, Atlanta,
Dallas, San Francisco, Los Angeles, Portland, Seattle
REPRESENTATIVES IN PRINCIPAL CITIES



Let Fyr-Fyter extinguishers protect your fleet! Write today for free catalog describing 1200 items sold by Fyr-Fyter—largest professional sales and service organization in the industry!

Safety Films

Continued from Page 330

proper food habits, irregular health habits. Rent—29.

Why Engines Are Governed—5 min—Using military engines, explains why engines are governed to prevent a waste of power. Free loan—42.

With Care—11 min—Shows profes-

sional, safe truck driving practices. Rent—8, 19.

Driver Training, Bus

Bus Driver—10 mm—Description of the hazards a professional bus driver meets on his daily run. A guide to safe, professional bus driving. Rent—22, 40, 43.

Gentlemen of the Highway—16 min—Illustrates qualifications, training, equipment and everyday routine of

the intercity bus drivers in attaining safe operation. Rent—22.

Hustle and Bustle—10 min—Shows safe bus operation, illustrating checking the vehicle, stopping, starting, following distances, safe speeds, turns, pedestrians, courtesy and reporting of hazards. Free loan—45.

It's a Big Job—25 min—Basic training film for urban transit bus operators. Rent—29.

The Operator and His Job—13 min—Basic film on the job of the urban transit bus operator. Free loan—2. Rent—15, 43.

The Operator and His Passengers—19 min—Demonstrates relationship of the urban transit bus operator and his passengers. Free loan—2.

The Operator and Safety—19 min—Shows techniques of safe operation for urban transit bus operators. Free loan—2. Rent—19, 29, 43.

Priceless Cargo—20 min—Demonstrates school bus accident prevention and proper planning of school bus routes. Free loan—39.

School Bus Operation, Part 2, Driving Hazards—Safety—14 min—Shows safe driving habits and practices in school bus operation. Free loan—10. Rent—15, 18, 19, 22, 31, 43.

School Bus Safety—18 min—Discusses safety factors involved in transporting school children. Includes maintenance and operational procedures. Rent—14, 46.

Driver Training, Truck

Caution at the Crossroads—12 min—Instructional film for truck drivers on avoiding intersectional accidents. Free loan—10, 12, 16, 20, 21, 25, 45. Rent—29.

Danger in Reverse—18 min—Basic film on backing commercial motor vehicles. Free loan—10, 12, 16, 20, 21, 25, 45. Rent—29.

Dark Daze—10 min—Illustrated effect of proper and improper eating and sleeping habits on night drivers of commercial vehicles. Free loan—12, 20, 25, 45. Rent—29.

Defensive Driving Series—6 films, 10 min each—Tells how to avoid collisions with (1) vehicles ahead, (2) (TURN TO PAGE 334, PLEASE)

I solve fitting problems in a flash!



your **IMPERIAL DISTRIBUTOR**

offers the industry's most complete line of tube fittings, tube-working tools and pressure hose—SEE HIM SOON!

Not only does he give you fast service on hundreds of Imperial automotive products—but he offers superior quality without premium cost. In short, he helps keep your equipment rolling at a profit!



Air brake fittings? Forged bodies on elbows and tees make Imperial the finest in the field! Easy to install. Long-run compression types. Absolutely tight joints! Can be furnished in cabinet stocks if desired (No. 222-F).



Vibration problems? Imperial Flex-Fitting joints never fail due to major tube vibration, minor tube movement! Often eliminate costly flexible fuel and oil lines. Can't leak even if reconnected repeatedly. For all metal tubing.



Standard tube fittings? Choice of compression, flared, inverted flared, threaded sleeve, brass pipe. 37° (steel), Ermeto, and many others used every day for automotive servicing.



Hi-Duty valves? Positive shut-off. Solid bottom—leakproof. Spring-loaded stem with "O"-ring seal exerts even tension on nickel-silver plug. 2-, 3- and 4-way types, also standard plug and needle valves.



Tube cutting? No. 274-F takes a big cut out of tube fitting time and cost. Free-wheeling, ball-bearing action. Spare cutting wheel. For ½ to 1" O.D. hard or soft metal tubing.



Single and double flaring? All types for making 45° and 37° flares. Sizes: ¼ to 2" O.D. No. 300F illustrated, for making 45° single flares—sizes ¾ to 1½" O.D. Also work-saving tube benders.

TODAY—ask your Imperial Distributor for a copy of Catalog No. 125, or write:

THE IMPERIAL BRASS MFG. CO.

6300 W. Howard St., Chicago 31, Ill., Dept. CCJ48
In Canada: 18 Hook St., Toronto, Ontario

IMPERIAL

Emblem of Quality

Brass Fittings • Flexible Lines • Shut-Off Valves • Faucets • Service Aids • Tubing Tools



Mr. Wally Yost

DIESEL ENGINE REBUILDER SAYS...

'We never have trouble with Clevite 77'

This Portland, Oregon company performs engine overhauls on every conceivable type of diesel-powered equipment and installs only one brand of bearings—Clevite 77.

Diesel Service Unit Company switched to Clevite 77* six years ago. Mr. Wally Yost, partner-owner, cites a good reason:

"As we were tearing engines down for overhaul or repair, Clevite 77 bearings were always in much better condition than any other bearings. We noticed some engines with two makes of bearings in the same engine; the Clevite 77 bearings were always in better shape. They would be like new compared to the other bearings."

Diesel Service continues to use Clevite 77 exclusively. Reason? Mr. Yost says:

"Ever since we have used Clevite 77, we haven't had any bearing problems. We used to pull engines down to check bearings, now we only pull the engines down for excessive blow-by, oil consumption or some cause other than bearings."

Engine rebuilders and fleet operators everywhere have learned that Clevite 77 is the finest high-duty engine bearing obtainable. Patented tri-metal construction provides greater fatigue strength, corrosion resistance and a superior running surface. Contact your nearest N.A. P.A. jobber and standardize on Monmouth Clevite 77 for a bonus in bearing performance.

*The words Monmouth, Clevite and Micro are registered trade marks of Clevite Corporation



Monmouth

ENGINE BEARINGS

CLEVITE SERVICE

Cleveland Graphite Bronze
Division of Clevite Corporation
Cleveland 3, Ohio, U.S.A.
2218

Safety Films

Continued from Page 332

vehicles behind, (3) vehicles coming from opposite direction, (4) vehicles approaching at an angle, (5) vehicles trying to pass you, (6) vehicles you're trying to pass. Released by the National Safety Council's Motor Transportation Division. Rent—29.

Hell Wouldn't Have Him—30 min—Film for truck drivers showing re-

sults of carelessness on highways. Free loan—3, 5, 45.

Knights on the Highway—10 min—Commercial driver training film on night driving safety. Rent—7, 14, 17, 19, 45.

The League of Frightened Men—22 min—Color film illustrating safe driving practices for fleet passenger car, over-the-road and city delivery truck drivers. It is an illustrated discussion between three drivers on how they have been able to avoid accidents. Free loan—27.

Look What You're Missing—27 min—Color film illustrating driving tip-offs used by truck drivers to prevent accidents. Basic film on defensive driving. Free loan—20.

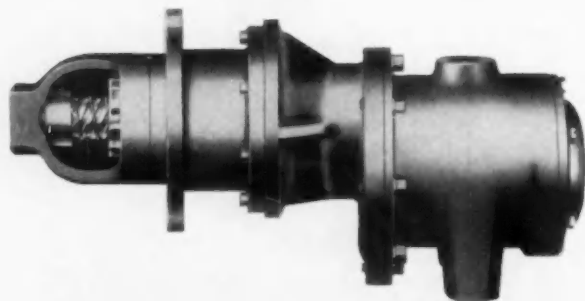
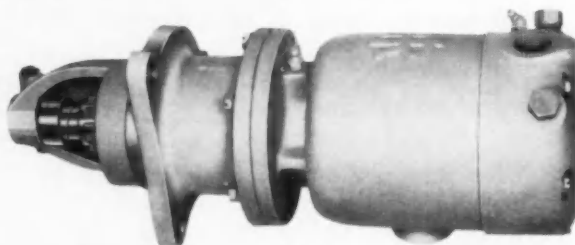
Looking for Trouble—10 min—Commercial driving training film on making a mechanical check on a truck to keep it safe and serviceable. Free loan—12, 20, 21, 35, 45. Rent—29.

Mind Your Manners—10 min—Brief lessons in advantages of driver courtesy for commercial vehicle drivers. Free loan—12, 20, 25, 45. Rent—29.

CUT fleet maintenance COSTS with modern **Ingersoll-Rand**

Size 5 BM Air Starting Motor

For Diesel displacement up to 500 cu. in.
—gasoline up to 1250 cu. in.—15 models

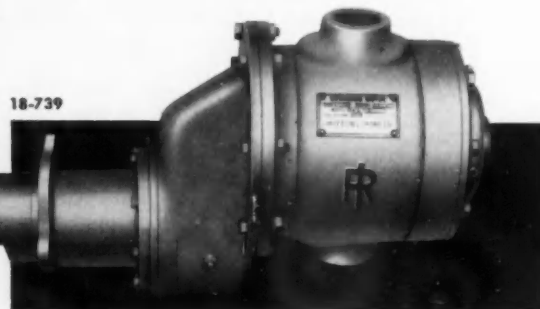


Size 20 BM Air Starting Motor

For Diesel displacement from 900 to 9000 cu. in.—gasoline from 1250 to 20,000 cu. in.—7 models

Size 9 BM Air Starting Motor

For Diesel displacement from 500 to 900 cu. in.—gasoline from 1250 to 2250 cu. in.—12 models



Pipeline on Wheels—26 min—Color film describing safe operation and construction of tank trucks. Free loan—8.

A Professional Portrait—22 min—Shows how the professional truck driver operates as compared with the amateur. Free loan—3, 11, 28, 45. Rent—22.

Safe Driving in Bad Weather. Part 1: Light Vehicles—17 min—Shows how to handle driving hazards resulting from rain, snow and ice. Free loan—41.

Safe Driving in Bad Weather. Part 2: Trucks and Tractor-Trailers—15 min—Explains importance of knowing the vehicle, driving according to road conditions, using bad weather equipment, staying alert. Free loan—41.

Split-Second Survival—10 min—Shows how a professional driver can prevent an imminent accident by reacting properly to the situation. Shows truck drivers what to do in such emergencies. Free loan—12, 20, 25, 45. Rent—29.

Tailgating—11 min—Describes danger of following too closely on the highway. Free loan—3.

They Drive in Safety—25 min—Color film on how to attain accident-free truck driving. Free distribution limited to 11 western states. Free loan—24. Rent—29.

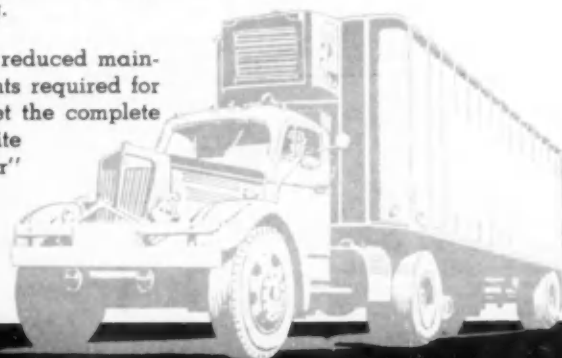
Too Close for Comfort—8 min—Shows how tailgating causes accidents in truck driving. Free loan—10, 12, 16, 20, 21, 25, 45. Rent—29.

(TURN TO NEXT PAGE, PLEASE)

... get sure air starting motors ...

Modern Ingersoll-Rand Air Starting Motors eliminate the expense and trouble of high output generators and heavy storage batteries required to start powerful Diesel and gasoline truck and bus engines. And with Air Starting Motors, starting power is constant regardless of temperature. Users report that annual replacement of batteries alone more than pays for the change-over to air starting.

In addition to direct savings resulting from reduced maintenance, the lighter weight of the components required for air starting permits increased payloads. Get the complete story on Air Starting by Ingersoll-Rand—write for your copy of "Go Modern—Start with Air"—Form 5094D.



18-739-1

Ingersoll-Rand

11 Broadway, New York 4, N.Y.

Safety Films

Continued from Page 335

Too Fast for Conditions—9 min—Shows why legal speed limits are often too fast for safety in truck driving. Free loan—10, 12, 16, 20, 21, 25, 45. Rent—29.

The Truck and the Driver—10 min—Illustrates professional, safe truck driving practices. Discusses truck maintenance. Rent—29.

You're Driving 90 Horses—26 min—Color film demonstrating defensive driving techniques for light truck operators. Free loan—4. Rent—22.

What Happened—10 min—Commercial driver training film on how to gather facts at the scene of an accident. Free loan—12, 20, 21, 25, 45. Rent—29.

Wrong Side—Suicide—10 min—Commercial driver training film on the hazards of crossing the center-

line. Free loan—10, 12, 20, 21, 25, 45. Rent—29.

Fire Prevention and Control

Cause for Alarm—Shows how to control fires, how to turn in an alarm, how to meet an emergency situation and how various types of extinguishers are used. Rent—29.

Control of Flammable Liquids—18 min—Manufacturers' film showing methods of handling, storing and conserving flammable liquids. Free loan—34.

Fight That Fire—10 min—Color film shows techniques of fighting small fires with common types of hand extinguishers including soda ash, carbon tetrachloride, foam and pump. Free loan—9, 26.

Fire and How to Fight It—23 min—Color film shows how different classes of fires start, various types of portable extinguishers, and how to use them. Free loan—26.

Stop Fires—Saves Jobs—18 min—Tells how fires start, how to report them and how to recognize fire hazards. Free loan—26.

Stop the Fire Thief—13 min—Illustrates recognition of fire hazards in handling and storage of flammable liquids, electrical equipment, welding, open heating equipment, smoking, and dirt and trash. Rent—29.

The Torch—10 min—Color, cartoon film on how carelessness causes fires. Free loan—26.

First Aid

First Steps in First Aid—30 min—Basic training film for beginners in first aid. Similar to "Help Wanted." Free loan—44.

Help Wanted—30 min—Basic training film for beginners in first aid. Similar to "First Steps in First Aid." Free loan—44.

Minutes That Count, Part 1—30 min—Color film for training in first aid techniques. Covers arterial bleeding and dressing of cuts and open wounds. Free loan—37.

Minutes That Count—Part 2—30 min—Color film for training in first aid techniques. Covers dislocations, fractures, infections and transportation of wounded. Free loan—37.

(TURN TO PAGE 338, PLEASE)



Torque wrench capacity doubled with new OTC e-x-t-e-n-s-i-o-n-s



Twice the range from your OTC torque wrench with an OTC extension. Snap extension on wrench drive, add the box-wrench or ratchet-drive end and you're all set. No complex figuring needed—just multiply dial reading by 2 (either foot-pounds or inch-ounces).



FULL LINE OF NEW OTC

BOX-WRENCH and SQUARE-DRIVE ENDS

Wide selection of ends to fit OTC extensions: box wrenches from $\frac{3}{4}$ to $3\frac{1}{2}$ inches; $\frac{3}{4}$, 1, $1\frac{1}{2}$ inch ratchet square drives; $\frac{3}{4}$, 1, $1\frac{1}{2}$ inch fixed square drives; 15° and double-offset box wrenches.

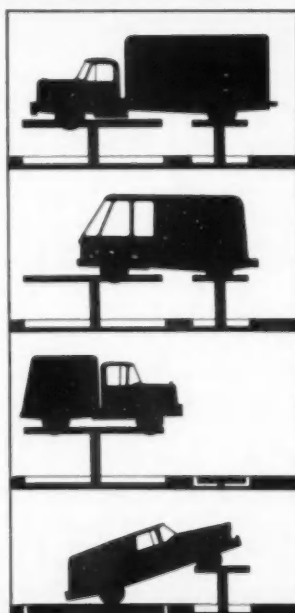


See your OTC distributor or write

OWATONNA TOOL COMPANY

341 CEDAR STREET

OWATONNA, MINNESOTA



WITH A **GLOBE 2-POST SLR HOIST**

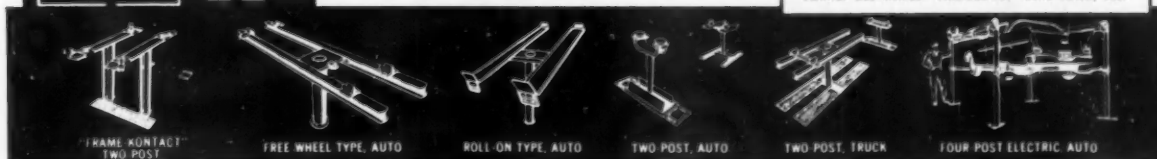
Trucks make money only when they are on the road. Prolonged lay-overs for repairs are costly . . . cut revenue producing travel time.

With a Globe SLR Heavy-Duty Truck Hoist, you can make major repairs faster and develop an efficient preventive maintenance schedule to eliminate these breakdowns. Designed for fleet shops, garages and repair shops servicing both commercial and passenger vehicles, this free-wheel Hoist provides immediate accessibility for replacing those hard-to-reach underbody parts.

It's versatile too! Posts can be operated independently for servicing two light trucks or passenger cars at the same time. Long rail is used for raising short wheelbase cars while rear saddle doubles as a front end Hoist. Cylinders can be located to provide for any wheelbase accommodation range up to 260".

Protect your investment and "up" your profits by installing a Globe SLR Heavy-Duty Truck Hoist now! For complete information, write to: **GLOBE HOIST COMPANY, EAST MERMAID LANE AT QUEEN STREET, PHILADELPHIA 18, PENNA.**

GLOBE
THE BEST LIFT[®]
TRUCK HOISTS
PLANTS: DES MOINES—PHILADELPHIA—LONG BEACH, CAL.



Safety Films

Continued from Page 336

Seconds Count—8 min—Describes Nielsen method of artificial respiration which has been adopted by the American Red Cross. Includes instruction on giving stimulants and protecting from shock. Free loan—1.

Shop and Dock Safety

The ABC of Hand Tools, Part 1—18 min—Animated, color film shows safe handling of such tools as hammers, screwdrivers, pliers and wrenches. Free loan—11.

The ABC of Hand Tools, Part 2—15 min—Animated, color film shows safe handling of such tools as files, saws, chisels, planes, drills and punches. Free loan—11.

For Safety's Sake—15 min—Demonstrates safe use of power driven, hand tools. Rent—29, 36.

Freight Handling Safety—11 min—Shows freight loading hazards, how to handle dock plates, how to lift, carry and pile, and how to use hand trucks. Free loan—45. Rent—29.

The Grinding Wheel, Its Care and Use—17 min—Color film shows safety in use and operation of grinding wheels. Free loan—30.

Grinding Wheel Safety—20 min—Color film covers grinding wheel safety, principal causes of wheel breakage and need for proper guards. Free loan—30.

Safety for Welders—7 min—Illustrates protective clothing and equipment for welders to prevent eye injuries and metal fume poisoning. Free loan—45. Rent—17, 32.

Safety Saves—30 min—Illustrates the "do's and don'ts" of safe driving fork lifts, tow tractors and hand trucks. Also shows safe handling of cargo. Free loan—6.

Use and Care of Chisels—12 min—Shows accident hazards to be avoided with proper use and care of chisels. Free loan—35. Rent—29.

Use and Care of Hacksaws—18 min—Shows accident hazards to be avoided with proper use and care of hacksaws. Free loan—35. Rent—29.

Use and Care of Hammers—11 min—Shows accident hazards to be avoided with proper use and care of hammers. Free loan—35. Rent—29.

Use and Care of Pliers and Screwdrivers—17 min—Shows accident hazards to be avoided with proper use and care of pliers and screwdrivers. Free loan—35. Rent—29.

Use and Care of Punches, Drifts and Bars—14 min—Shows accident hazards to be avoided with proper use and care of punches, drifts and bars. Free loan—35. Rent—29.

Use and Care of Wrenches—20 min—Shows accident hazards to be avoided with proper use and care of wrenches. Free loan—35. Rent—29.

Welding, the Safe Way—18 min—Training film for new welders illustrates safe working conditions for most welding operations. Rent—29.

(TURN TO PAGE 340, PLEASE)



YOUR CONFIDENCE Is What We're After!

That's why we make P & D Ignition Parts the best on the market. It's why we select our raw materials with care, engineer them for top performance, and give them a triple inspection before shipping. We call the result Quality Controlled. You'll call it just what you hoped some manufacturer would have the foresight to give you, to help build customer satisfaction and profits.

GENUINE P & D PARTS

MANUFACTURING CO., INC.
Established 1920
19-02 Steinway St., Long Island City 5, N.Y.
Export Sales: Borg Warner International, 36 So. Wabash Ave., Chicago 3, Ill.

TOUGH RUNS PROVE IT... Firestones cost least per mile



CENTRAL MOTOR LINES INC. GETS OVER 3 RECAPS PER TIRE WITH FIRESTONES!

"Fast, over the highway hauling is our specialty," reports Joe K. Hall, vice president and general manager, Central Motor Lines Inc., Charlotte, North Carolina.

Every year the big Central Motor Lines fleet rolls up tremendous mileage along the Eastern Seaboard and the Middle West hauling textiles and general freight. Schedules are tight, speeds as high as legal limits permit.

"Firestone Transports are the best answer we've found for our kind of trucking," Mr. Hall continues. "Con-

sistently, we average three recaps per tire and up. No tires we tried hold costs in line like Firestones."

Leading fleet records prove Firestone S/F (Safety-Fortified) cord builds in extra stamina for extra recaps. Firestone's exclusive treating process eliminates stretch and body-growth to give more retreads for lower cost mileage.

On drive wheels and free rolling wheels, Firestones save truckers money at every turn. No wonder they're the pride of America's great truck fleets!



TRANSPORT SUPER MILEAGE TRANSPORT SUPER MILEAGE LUG SUPER ALL TRACTION

YOU CAN'T BUY A TIRE THAT COSTS LESS PER MILE THAN FIRESTONE

Firestone

BETTER RUBBER FROM START TO FINISH

Enjoy the Voice of Firestone every Monday evening on ABC television
Copyright 1958, The Firestone Tire & Rubber Company



Lubriplate No. 630-2 is a high temperature, extreme pressure, water-repellent, grease type lubricant. Ideal for the general lubrication of Industrial, Automotive, Construction, Farm and Marine Equipment. Lubriplate Grease Gun Cartridges provide an easy, quick, economical means of application. Prevent the waste and mess of hand filling. Packed 10 Cartridges in a handy carrying carton.

REGARDLESS OF THE SIZE AND TYPE OF YOUR MACHINERY, LUBRIPLATE LUBRICANTS WILL IMPROVE ITS OPERATION AND REDUCE MAINTENANCE

For nearest LUBRIPLATE distributor see Classified Telephone Directory. Write for free "LUBRIPLATE DATA BOOK"... a valuable treatise on lubrication. LUBRIPLATE DIVISION, Fiske Brothers Refining Company, Newark 5, N. J. or Toledo 5, Ohio.



Safety Films

Continued from Page 338

SOURCE LIST

NUMBERS refer to the numbers at the end of the description of each film. Where more than one source is given, write to the closest.

1. Affiliated Aetna Life Cos.
Motion Picture Bureau
151 Farmington Ave.
Hartford 15, Conn.
2. American Transit Assn.
292 Madison Ave.
New York 17, N. Y.
3. American Trucking Assns., Inc.
Public Relations Dept.
1424 Sixteenth St., N.W.
Washington 6, D. C.
4. Bell Telephone Co.
Contact local office.
5. Bruce Dodson & Co.
2800 Wyandotte St.
Kansas City 10, Mo.
6. Clark Equipment Co.
Industrial Truck Div.
Battle Creek, Mich.
7. The Distributors Group, Inc.
756 Peachtree St.
Atlanta, Ga.
8. The duPont Co.
Petroleum Chemical Div.
Rockefeller Center
Suite 1810, RKO Bldg.
New York 20, N. Y.
9. Employers Mutual Liab. Ins. Co.
407 Grant St.
Wausau, Wis.
10. Nationwide Mutual Ins. Co.
Safety Dept.
246 North High St.
Columbus 16, Ohio
11. General Motors Corp.
Department of Public Relations
Film Section

New York City and Long Island
1775 Broadway
New York 19, N. Y.

Eastern States
General Motors Bldg.
Detroit 2, Mich.

(TURN TO PAGE 344, PLEASE)



your truck motors
MORE PULL

Cloyes Timing Gears are held to close tolerances and good finish. They are shaved and matched at the factory, packed in pairs and delivered to you properly matched. They need no "break-in" period... can extend the life and performance of your motors.

Gear specialists since 1921

HEADQUARTERS FOR



- TIMING GEARS
- CHAINS
- SPROCKETS

for **ALL** trucks, buses,
passenger cars and
industrial motors

CLOYES GEAR & PRODUCTS, INC.

Gear Specialists since 1921
17214 ROSELAND RD., Cleveland 12, Ohio



Maintenance managers of many large fleets find that Blue Streak Heavy-Duty Fleet Ignition substantially reduces emergency road calls and "down time" caused by ignition failures. See your Blue Streak jobber for details, or write Standard Motor Products, Inc., Long Island City 1, N. Y.



PIONEER IN HEAVY-DUTY IGNITION
FOR FLEETS



RAYON
CORD
TIRES

FIVE WAYS

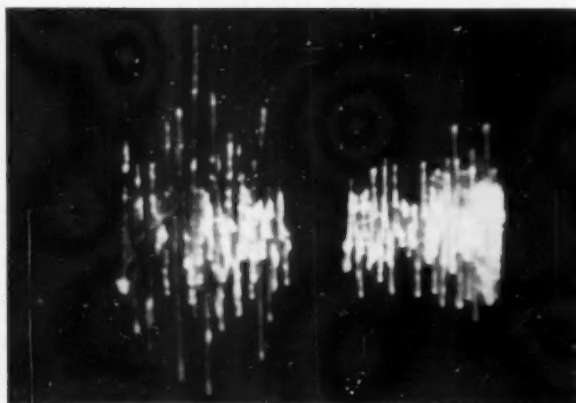


One of the newest pieces in Yale's 535 unit fleet. Like all other Yale units, it rolls on rayon.

S BEST BY TEST!



LONGER TREAD LIFE...test driven under similar conditions for same length of time, rayon tire (right) shows much less tread wear than nylon tire.



QUIETER RIDE LESSENS DRIVER FATIGUE...graph taken from oscilloscopes shows difference in octave noise levels of rayon tires (right) versus nylon under normal operating conditions.



GREATER BLOWOUT PROTECTION...rayon tires tested by smashing into six-inch granite curbstone at 60 m.p.h., show no trace of cord rupture even under microscopic examination.

No wonder new 1958
RAYON CORD TIRES
pay off for
YALE TRANSPORT CORP.

MAJOR EAST COAST CARRIER.

1. **Greater Heat Resistance**...new rayon tire cord actually grows stronger as heat builds up at high road speeds.
2. **Reduces Highway Hypnosis**...tires ride up to 33 per cent quieter, reducing dangers of high noise level.
3. **More Stability**...no troublesome flat spotting or "morning thump"...safer, easier steering control.
4. **Longer Tread Life**...controlled tests prove rayon tires give up to 26 per cent longer tread life.
5. **Retreadability**...comparative retreading tests prove rayon tires take more retreads, with greater mileage per retread.

YALE TRANSPORT CORP., with some 180 tractors, 225 trailers, and 130 trucks, covers more than 17,500,000 miles a year, and all of this mileage is on dependable rayon cord tires.

HENRY MONDSCHIN, maintenance superintendent at Yale, has this to say about new 1958 rayon cord tires: "We find that rayon cord tires mean greater mileage. We're getting an average of 125,000 miles on original tread and a good percentage of our tires are recapped three times. Rayon also means less down-time loss and a low, low tire inventory. Rayon cord tires really pay off for us."



**AMERICAN RAYON
INSTITUTE, INC.**

350 Fifth Avenue, New York 1, N. Y.

Safety Films

Continued from Page 340

Western States
508 San Francisco Bank Bldg.
405 Montgomery St.
San Francisco 4, Cal.

12. Hardware Mutuals Ins. Cos.
200 Strongs
Stevens Point, Wis.

13. Hubbard Hunt Productions
1459 North Seward
Hollywood 28, Cal.

14. Univ. of Illinois
Audio-Visual Aids Service
Div. of Univ. Extension
Champaign, Ill.

15. Indiana Univ.
Audio-Visual Center
Div. of Adult Education
1804 East 10th St.
Bloomington, Ind.

16. Iowa National Mutual Ins. Co.
Cedar Rapids, Iowa

17. State Univ. of Iowa
Bureau of Audio-Visual Inst.
Extension Div.
Iowa City, Iowa

18. Univ. of Kansas
Bureau of Visual Instruction
Lawrence, Kan.

19. Kunz Motion Picture Service
1319 Vine St.
Philadelphia 7, Pa.

20. Liberty Mutual Ins. Co.
175 Berkeley St.
Boston 17, Mass.

21. Lumbermans Mutual Casualty Co.
PSFS Bldg., 12th and Market Sts.
Philadelphia, Pa.

22. Michigan State University
Audio-Visual Center
East Lansing, Mich.

23. Modern Talking Picture Service
45 Rockefeller Plaza
New York, New York

24. Motor Truck Assn. of Southern
Cal
605 West Seventh St.
Los Angeles, Cal.

25. National Assn. of Automotive Mu-
tual Ins. Cos.
20 North Wacker Drive
Chicago 6, Ill.

26. National Board of Fire Under-
writers
Film Library

East of Rocky Mts.
Bureau of Communication Re-
search
13 East 37th St.
New York 17, N. Y.
(TURN TO PAGE 346, PLEASE)

NEW CLEVELAND UNIFORGE CAM LOCK

ELIMINATES DOOR SHIFTING!

MR. FLEET OWNER: make sure you get UNIFORGE, the only cam lock that eliminates *side shifting* of locked doors. Insist that your builder equip your trailers or trucks with the new Cleveland Uniforge Lock, the greatest advancement since the introduction of cam locks.

UNIFORGE is drop forged thru-out! It's lighter, stronger, and has no brittle cast components.



MADE IN KIT FORM

Compact 7" x 13" shipping carton, reduces freight costs. No jiggling required. Easily assembled with locally available 3/4" water pipe. Write for full details.

H. K. PORTER COMPANY, INC.

FORGE AND FITTINGS DIVISION
Cleveland Forge Works, Cleveland 4, Ohio

Cost Less Because They Wear Longer!

AKRO Truck & Trailer Flaps

- Built like the toughest tires. Super-tough rubber completely cord-impregnated!
- Conform to all state codes. Approved by state highway patrols.
- Complete size range: 24" x 30" to 24" x 40".

Automotive Service & Know-How Since 1929
THE BUXBAUM COMPANY
CANTON 1, OHIO



Capacity
2, 5 and 7 Tons

NEW HEIN-WERNER

STOUT-BOY Stands

properly support vehicles for
safer underbody work--
relieves jacks for use on other jobs!

You gain two ways when you put Hein-Werner Stout-Boy Stands in your shop. First, they prevent the accidental lowering of raised vehicles, offer quicker adjustment and provide greater safety and stability. Second, they free floor service jacks for use on other jobs — no tie up of equipment. Stout-Boy Stands, available in capacities of 2, 5, and 7 tons, are designed and tested to support 50% overload for safer underbody work.

NEW HEIN-WERNER **Model AL-30 Air Lift Jack**

Fast acting Model AL-30 safely raises loads in seconds using air. Saddles adjust from 24" to 54" for better contact and balanced load support. Safety latch locks automatically. Saddle bar folds for easier maneuvering in confined spaces. Capacity: 3000 lbs.



Capacity: 3000 lbs.

NEW HEIN-WERNER **Truck Transmission Jack**

Designed for one-man operation, the Model 53 handles all heavy duty transmissions, torque converters, differentials and rear end assemblies in half the time formerly required. Effortless Saginaw Screw raises or lowers capacity loads with amazing ease . . . permit finer adjustments. Safety lock with double pawls automatically engages at any desired working height. Lifting head tilts 4 ways for precise alignment. Capacity: 2000 lbs.



Capacity: 2000 lbs.

Keep up to date in '58 with Hein-Werner. Remember, Hein-Werner manufactures and sells more hydraulic jacks than any other company in the world. Be choosy . . . be safe — make sure all of your shop jacks are Hein-Werner.



For Your Protection
all factory approved
service stations now
display this emblem.

HEIN-WERNER CORPORATION

WAUKESHA, WISCONSIN

The complete Hein-Werner line includes: The famous "55", "Screwball" and WHIZ Twin Saddle Service Jacks . . . Under Axle Jacks of 1½ to 100 tons capacity . . . "Bumper-Lift" Jacks for passenger cars . . . Service Jacks for shop use . . . Transmission Jacks . . . "Push and Pull" and "Pushmaster" Jacks for body, fender, and frame repair work.

Safety Films

Continued from Page 344

- West of Rocky Mts.
Merchants Exchange
San Francisco 4, Cal.
27. National Dairy Products Corp.
Safety Dept.
260 Madison Ave.
New York 16, N. Y.
(or contact local division of Na-
28. National Highway Users' Conference
National Press Bldg.
Washington 4, D. C.
29. National Safety Council
Film Bureau
425 North Michigan Ave
Chicago 11, Ill.
30. Norton Co.
Publicity Dept.
Worcester, Mass.
31. Univ. of Oklahoma
Educational Materials Service
Extension Division
Norman, Okla.
32. Princeton Film Center
Princeton, N. J.



No. 75
Copper Tubing Dispenser (includes 100 foot spools)

No. 75A
Copper Tubing Dispenser (includes 50 foot spools—not illustrated)

Now a copper tubing dispenser for your shop!

Save space, avoid waste, eliminate broken packages and odd lengths with the new No. 75 or 75A Copper Tubing Dispenser. "Layerwound" coils unwind like thread from *steel spools* . . . straighten as they uncoil . . . without kinks . . . and the tubing is marked every foot. Spools can be removed individually and carried to the job.

saves space . . . eliminates waste

No. 75 includes 100 foot steel spools of 3/16", 1/4", and 5/16" copper tubing. No. 75A includes 50 foot steel spools of 3/16", 1/4" and 5/16" copper tubing. Both available with any three of the following sizes: 1/8"* , 3/16", 1/4", 5/16", 3/8". *Available in 100 foot spools only. Distributed by leading automotive wholesalers everywhere. DORMAN PRODUCTS, INC., Cincinnati 2, Ohio.



33. Progressive Pictures
6351 Thornhill Drive
Oakland 11, Cal.
34. The Protectoseal Co.
Sales Department
1920 South Western Ave.
Chicago 8, Ill.
35. Proto Tool Co.
2209 Santa Fe Ave.
Los Angeles 54, Cal.
36. Sarra, Inc.
16 East Ontario St.
Chicago 11, Ill.

(TURN TO PAGE 348, PLEASE)

Aluminum Skids



New 13-ft section aluminum skids for haulways save 300-lb per trailer. Designed for one-man handling, the ramps were developed jointly by Automobile Shippers, Inc., and Reynolds Metals Co.



C.I.M. FLOODLAMPS are ALL-GLASS, give longer service life, more light, and don't grow dim!



General Electric's new floodlamp for Construction and Industrial Machinery is *all-glass*. This one-piece unit has no gaskets to leak. It is hermetically sealed so that dust, dirt and moisture can't get inside to scatter or dim light. Reflectors and lenses are a special hard glass that won't crack if splattered by rain or snow. There is no inner bulb to blacken—the whole unit is a bulb! Result: G-E C.I.M. Floodlamps *do not* grow dim.

Available in the 12- and 24-volt sizes, these lamps feature *two* single coil filaments *in series* instead of one long filament—and being shorter, the filaments are much stronger. These sturdy filaments are not welded to the lead-in wires . . . instead, they are clamped in a vise-like grip for added resistance to breakage. So filaments *stay* in focus.

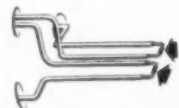
What does this mean for you? It offers rugged-duty floodlamps that, when used in shock-mounted housings, will give a broad-beam spread, both vertically and horizontally, through any weather, for use on bulldozers, graders, scrapers, crawlers, or other road-building, mining and construction machinery.

General Electric makes a full line of all-glass sealed beam lamps for Construction and Industrial Machinery. Contact your nearby G-E Lamp Distributor or write: General Electric Co., Miniature Lamp Dept. CCJ-48, Nela Park, Cleveland 12, Ohio.

SPECIFICATIONS FOR G-E C.I.M. FLOODLAMPS

(PAR-46 Bulbs—2 contact lugs—5 $\frac{3}{4}$ " dia.—500 hours designed life)

G-E No.	Circuit Volts	Watts
4478	12	60
4578	24	60



Two single coil filaments in series for greater strength



Vise-like grip adds resistance to filament breakage

Progress Is Our Most Important Product

GENERAL  ELECTRIC

Safety Films

Continued from Page 346

37. Standard Oil Co. of Cal.
225 Bush St.
San Francisco, Cal.

38. Sterling-Movies U. S. A., Inc.
205 East 43rd St.
New York 17, N. Y.

39. Superior Coach Corp.
Sales Promotion Dept.
Lima, Ohio

40. Syracuse Univ.
Educational Film Library
Collendale near Lancaster
Syracuse 10, N. Y.

41. U. S. Air Force
Public Information Officer

Eastern Film Exchange HQ
1612 South Cameron St.
Harrisburg, Pa.

Midwestern Film Exchange HQ
San Antonio Air Force Station
San Antonio, Texas

Southern Film Exchange HQ
Orlando Air Force Base
Orlando, Fla.

Western Film Exchange HQ
McClellan Air Force Base
McClellan, Cal.

42. U. S. Army
Signal Officer

First Army
Governors Island
New York 4, N. Y.

Second Army
Fort Meade, Md.

Third Army
Fort McPherson, Ga.

Fourth Army
Fort Sam Houston, Texas

Fifth Army
1660 East Hyde Park Blvd.
Chicago, Ill.

Sixth Army
Presidio of San Francisco
San Francisco, Cal.

Military District of Washington
Washington 25, D. C.

43. Univ. of Tennessee
Div. of Univ. Extension
Univ. Film Library
Knoxville, Tenn.

44. U. S. Bureau of Mines
Graphic Services Section
4800 Forbes St.
Pittsburgh 13, Pa.

45. Utica Mutual Ins. Co.
First National Bank Bldg.
Utica, N. Y.

46. Commonwealth of Virginia
State Board of Education
Film Production Service
Richmond 16, Va.

47. Victor Kayfetz Productions
1780 Broadway
New York 22, N. Y.

48. Cab Safety Research Bureau
1819 Broadway
New York, N. Y.

49. Young American Films
18 East 41st St.
New York 17, N. Y.



An OLD STORY that's NEW EVERYDAY

Our inception "harks" back to the whiffle-tree, whip socket days and (E) Saddlery was long established when the first truck body fitting left our plant for installation on a commercial vehicle.

We are yet privileged to include some of our oldest customers on our active lists today.

New items of advanced design to broaden the Eberhard line

originate in our engineering department ever so frequently.

New body builders and fleet operators look to our design and manufacturing facilities to meet their most stringent diversified needs.

The latest catalog is illustrated above. If your files are lacking, a call or note on your company stationery will bring your copy "pronto."



Body by
MADAY BODY & EQUIPMENT CO.
BUFFALO, N. Y.

Body by
AUTOBODY WORKS, INC.
APPLETON, WISC.



EBERHARD MANUFACTURING COMPANY
Evarts Ave. • Cleveland 14, Ohio
DIVISION OF THE EASTERN MALLEABLE IRON COMPANY



"These CEMCO Trailer Jockeys have been very significant in the reduction of transportation costs . . ."

— from Mr. Smaltz' letter to Freuhauf's branch manager in Atlanta.



"The hand-cranking of landing gear around our place is almost a thing of the past", continues Clyde Smaltz, Director of Transportation, Mansfield Tire & Rubber Company, who operates three CEMCO Trailer Jockeys around several plants and warehouses.

For real savings in intra-plant, cross-city material handling...

Getting right down to cases, the Mansfield Tire & Rubber Company, Mansfield, Ohio, widely known truck and passenger car tire builder (Mansfield, Pennsylvania, Inland) has been able to save the cost of 24 man-hours daily, as well as the investment in one extra tractor, by using CEMCO Trailer Jockeys. This equipment is used around the clock, and, as Mr. Smaltz states in his letter to a

Freuhauf Branch Manager, has been "very significant in the reduction of transportation costs." The first CEMCO, purchased six years ago, has outlived two tractors, is about to be transferred to a new tractor. This satisfactory experience led to the purchase of two additional Trailer Jockeys. Let us help you reduce your costs, too! Rental plan available, if needed.

CEMCO INDUSTRIES, INC.
GALION, OHIO

Manufacturers of: Trailer Jockeys,
Fifth Wheel Cranes, Mobile Machine
Shops, Mobile Lubricating Units,
Split-Shaft Power Take-Offs,
Hydraulic-Lift Tailgates, Dock Ramps.

A small fleet of nine trailers and three CEMCO-equipped tractors is kept busy hauling new tires from Conveyor's end to warehouse—a 1½ mile haul with Trailer Jockey in raised position—and transporting raw materials from plant to plant.

The CEMCO Trailer Jockey, using hydraulic power from PTO, can put its sturdy shoulder under 37,500 pounds of trailer at the kingpin (or, for off the highway application, the heavy-duty unit will handle 60,000 pounds at the kingpin) and greatly speed up the shifting of bodies around a truck terminal, or, accelerate movement of trailers in an intra-plant system such as Mansfield Tire.



Truck and Bus Public Relations Films

THIS LIST of films has been selected so you can take advantage of every opportunity to show the public the importance of bus and truck transportation and the value of better roads in today's economy. Show them at your local Rotary, Kiwanis, Lions,

etc.—benefit your community and yourself.

Films listed have been divided into two sections—Highway Transport Promotion (see below) and Adequate Highways (see page 352). Most are available for your use without cost—

you pay only transportation and insurance. Others carry a nominal rental charge. Because of demand, films should be ordered as far in advance as possible.

All of the films in the list are 16 mm. All are sound films unless otherwise indicated. **Sound films should never be shown in a silent-type projector as it destroys the sound track.** Projectors for showing the films, if not otherwise obtainable, can usually be rented locally at low cost.

Numbers at the end of each film's description refer to the list of sources beginning on page 353.

Highway Transport Promotion

Haulaways West—25 min—Describes truck transportation and safe truck driving in the delivery of four new automobiles from a Detroit plant to a new car dealer in Los Angeles, Cal. Free loan—18.

Horizons Unlimited—17 min—Graphically shows the importance of truck transportation in our everyday living. Includes scenes of many different types of trucks. Free loan—4, 11, 13, 19, 27.

Look What You're Missing—27 min—Color film illustrating driving tip-offs used by truck drivers to prevent accidents. Basic film on defensive driving. Free loan—15.

The McGurk Way—26 min—Presents history of highway transportation from colonial days to the present. An interesting outline of state legislation affecting highway transportation is included. Free loan—12.

Mr. O'Flynn's Fifty Million Wheels—25 min—Shows how and why trucks are important, but does it in a "practical fantasy" that will be entertaining for any service club, social group, etc. Free loan—5.

Oil—The Invisible Traveler—20 min—Shows how oil and oil products are transported from the well to the consumer. Including many illustrations of tank trucks at work. Free loan—23.

Pipeline on Wheels—26 min—Shows how the modern tank truck is a strong, carefully engineered vehicle for safe transportation of gasoline and other liquids. Free loan—9.

A Professional Portrait—22 min—Shows how professional truck drivers "keep 'em rolling" safely, skillfully.
(TURN TO PAGE 352, PLEASE)

**wheel cylinder cups on
MORE THAN 60% OF ALL
'56-'57-'58 CARS NOW COME
WITH EXPANDERS!**



Use EIS

**"E" Series HRC^{*}
Cups with Expanders**

**For Profitable and
Safe Replacements!**

*HEAT RESISTING COMPOUND



Yes, more than 60% of all the new cars from 1956 thru 1958 (including Cadillac and Imperial) now have wheel cylinders equipped with expanders!

To do all jobs right, you **SHOULD** use EIS HRC^{*} CUPS equipped with Expanders! EIS "E" Series Cups are specifically made to withstand the higher brake drum temperatures caused by higher speeds and faster stops. They're available in all sizes and are included in all EIS Wheel Cylinders as well as EIS Repair Kits.

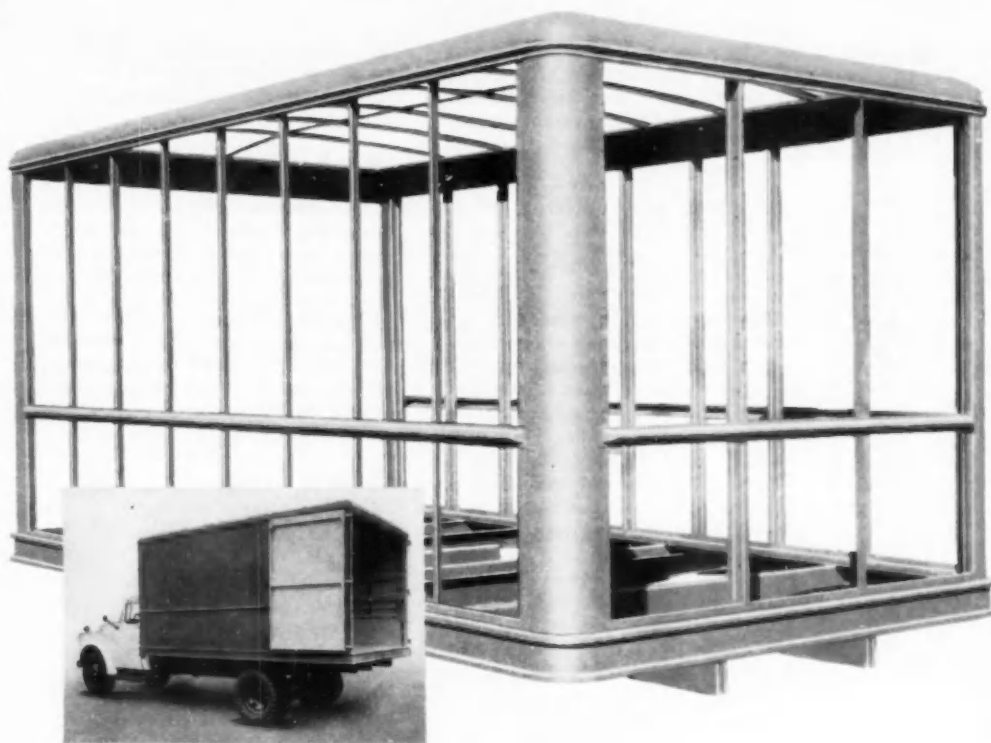
Ask your Jobber about all EIS Cups—Ribbed Cups, Plain Cups as well as the new, Filler-Type Cups! They're moulded of HRC^{*}, of course!



NEW SELLING AIDS AVAILABLE.—Colorful display cards as well as window banners. They're yours for the asking!

Write for Catalog

EIS AUTOMOTIVE CORP., Middletown, Conn.



Saved — 60% in construction time with **PARISH** prefabricated truck body frames

Get the advantages of Parish "Packaged Framing" in your truck bodies. Your body builder can assemble 5 prefabricated Parish bodies for every 2 of other makes. Parish steel framing is only slightly heavier than the lightest materials, yet offers higher strength and longer life.

Your Parish prefabricated truck body frame goes together 1 . . . 2 . . . 3! Five lightweight prefabricated components are quickly assembled into an all steel, high-strength truck body frame. You get a considerable reduction in overall truck body costs.

The paneling and flooring materials can be whatever type you select. To accommodate aluminum paneling, Parish framing can be furnished with aluminum roof caps, corner covers and ball corners.

Remember the name . . . PARISH . . . for high quality prefabricated truck body framing. Write for full information and prices.

Rear corner
of roof weld

Welded
floor corner

- Precision Assembly of top quality components • All steel construction • Welds properly located for maximum strength • Outer skin can be aluminum or steel • Wide variety of sizes • Repairs easily made with standard components • Flexibility which permits various types and placements of doors

● DANA PRODUCTS : Transmissions • Universal Joints • Propeller Shafts • Axles • Torque Converters • Gear Boxes • Power Take-offs • Power Take-off Joints • Rail Car Drives • Railway Generator Drives • Stampings • Spicer and Auburn Clutches • Parish Frames • Spicer Frames • Forgings



PARISH

PRESSED STEEL

DANA

Division of Dana Corporation

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Public Relations Films

Continued from Page 350

considerately, and how their work brings us the things we need and use. Free loan—4, 13, 19.

Rehearsal for Disaster—20 min—Produced by the Federal Civil Defense Administration in cooperation with American Trucking Assns., it shows the important part trucks play in helping rescue and rebuilding in local disasters (floods, hurricanes, etc.) and in national emergencies. Free loan—4.

The Road Ahead—15 min—Stresses the importance of truck transportation with many excellent scenes of trucks at work. Free loan—4, 27.

Singing Wheels—23 min—Portrays the part trucks play in building, distribution, and serving. A particularly dramatic sequence shows what would happen if trucks disappeared. Free loan—4.

Teamwork in Transit—21 min—Tells the story of the trucking indus-

try's importance to our everyday life and traces the history of highway transportation. It emphasizes the important part played by mechanics and drivers. Free loan—6.

They Drive in Safety—25 min—Color film on how to attain accident-free truck driving. Free distribution limited to 11 western states. Free loan—17. Rent—20.

They drive the Long Haul—28 min—Color film illustrating delivery of a load of freight between Los Angeles, Cal., and Spokane, Wash. It emphasizes the driver's part in truck fleet operation. Free loan—26.

To New Horizons—17 min—Depicts the development of transportation in the post war era. Free loan—27.

To Serve Their Needs—20 min—Built around a day in the life of an Oregon truck driver, color film illustrates how trucks serve this state. Free loan—21.

Trucks That Serve Our City—14 min—Shows how trucks serve the modern city in respect to communica-

tion, food supply, sanitation, construction and as the necessary link between railroads and the consumers. Rent—24.

Wheels of Progress—24 min—Color film explaining how long haul motor freight operates including its history, background and highway safety. Shows how truck transportation serves the nation. Free loan—22.

With Care—11 min—A professional truck driver tells a private motorist about how fleet operators promote safety on the highway. Includes illustrations of safe truck driving. Free loan—25. Rent—8, 14.

Adequate Roads

Better and Safer Highways—7 min—Promotes public understanding of Project: Adequate Roads—Explains why our present roads are inadequate and what should be done to remedy the situation. Free loan—5.

Building a Highway—Roadbuilding—10 min—Shows how a concrete highway is built from the initial grading all the way until it's opened to traffic. Rent—16.

"I ALMOST HAD HER, COLD TURKEY!"



IT WAS A BLIND CORNER, AND ALL OF A SUDDEN, THERE WAS THIS GIRL IN THE SPORT MODEL. MY BRAKES GRABBED. I SWERVED AND ALMOST HIT HER...



...LUCKY I GOT THE TRUCK UNDER CONTROL WHEN I DID. BELIEVE ME WHEN I SAY I'M AWFULLY SORRY, LADY. I CAN BELIEVE IT! YOU LOOK EVEN SHAKIER THAN I FEEL!



YOU SEE, DIRT IN THE BRAKE DRUM WEARS DOWN THE SEAL UNTIL IT LEAKS. GREASE SEEPS OUT. WHEN IT HITS THE BLOCK, IT CAN MAKE THE BRAKE SLIP.



MUSTA BEEN THAT NEW MECHANIC. BUT DON'T WORRY—WE'LL GET THOSE SEALS CHANGED PRONTO. WITH THIS BIG C/R SEAL CABINET, YOU CAN SPOT THE RIGHT ONE IN A SECOND...



...AND WHEN YOU PICK A C/R SEAL, YOU KNOW IT'LL FIT RIGHT AND SEAL RIGHT!



Construction Ahead—22 min—Color film similar to "Building a Highway," film starts with the first plans and proceeds to the finished road. Rent—16.

Give Yourself the Green Light—26 min—Color film for showing to service clubs and other public groups. It shows how everybody benefits from adequate highways and what can be done to obtain them. Free loan—13.

Highways Ahead—29 min—Color film tracing the history of our roads. Free loan—7.

Let's Get Out of the Muddle—19 min—Shows why our roads are inadequate, how rapidly increasing vehicle registrations and old, worn out roads combine to halt our progress. Shows why and what kind of better roads are needed. Free loan—2, 13. Rent—16.

The Longest Mile—30 min—Color film showing how the general public can join forces with county, state and federal highways officials to obtain better roads. Distribution limited to states east of the Mississippi River. Free loan—1.

Pennsylvania's Highway Story—22 min—Color film showing the importance of adequate highways to the state's economy. The story applies to any state. Free loan—2.

The Perfect Crime—21 min—Color film that shows how more adequate highways can promote traffic safety, prevent accidents. Free loan—7.

The Road Ahead—74 min—Color film in three reels—shows the operation of a state highway department, administrative as well as operational problems and their solution. Designed for public showing, it shows what goes on in building adequate highways. Free loan—2.

The Road Ahead—23 min—Color film describes how the Interstate Highway System will be planned, built and used. Describes public's part in making these highways a reality. Free loan—7.

Road Block—22 min—In color, it shows how the public can work together to get better, safer highways. Free loan—7. Rent—16.

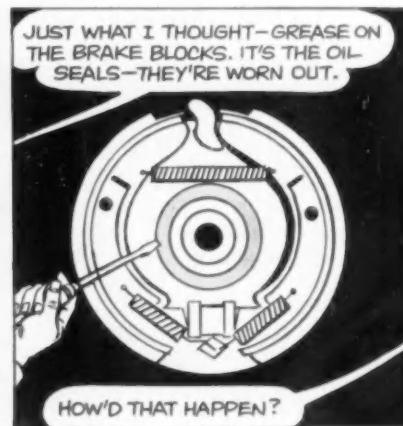
Ten Days per Man—26 min—New color film that encourages public and individual interest in our present road problems and support of legislation for better roads. Illustrates how modern methods and equipment can provide more roads at lowest cost. Free loan—10.

We'll Take the High Road—30 min—Color film answering many questions about the planning and building of the Interstate Highway System. Free loan—3.

SOURCE LIST

NUMBERS refer to the numbers at the end of the description of each film. Where more than one source is given, write to the closest address.

1. Allied Chem. & Dye Corp.
Paving Material Sales
The Barrett Division
40 Rector St.
New York 6, N. Y.
2. American Assn. of State Highway Officials
917 National Press Bldg.
Washington 4, D. C.
(TURN TO NEXT PAGE, PLEASE)



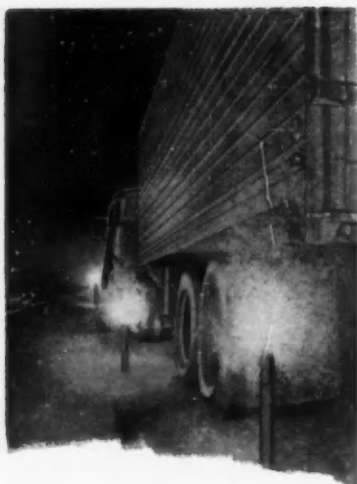
FREE FOLDER

Tells all about special fleet stocking cabinets and front wheel oil seal installation tool.

WRITE FOR YOUR COPY TODAY!

Remember—ALWAYS REPLACE NEVER RE-USE!





**Quicker Starting,
Better Performing**

KILGORE

Flares

Provide

**SAFETY, LIGHT, CONVENIENCE
for Highway
Night-Time Emergencies**

A pitch-black night . . . a heavily-traveled highway . . . a stalled, unlighted truck . . . a rapidly approaching car . . . all stage props for a serious, costly accident. But, with Kilgore Flares placed ahead, alongside and behind the truck, the oncoming motorist is aware of lurking danger.

Kilgore Automotive and Truck Flares perform in all kinds of weather. Faster starting . . . candle power substantially exceeds minimum requirements . . . convenient, sturdy wire stand or spike . . . plastic plug for greater rigidity. Equip your fleet with Kilgore Automotive and Truck Flares. See your Kilgore dealer.

Kilgore, INC.

INTERNATIONAL FLARE SIGNAL DIVISION
WESTERVILLE 2, OHIO

Public Relations Films

Continued from Page 353

3. American Road Builders Assn.
World Center Bldg.
Washington 6, D. C.
4. American Trucking Assn., Inc.
Public Relations Dept.
1424 Sixteenth St., N.W.
Washington 6, D. C.
5. Association Films
Broad at Elm
Ridgefield, N. J.

79 East Adams St.
Chicago, Ill.

1108 Jackson St.
Dallas, Texas
6. Bendix Westinghouse Automotive
Air Brake Co.
901 Cleveland Rd.
Elyria, Ohio
7. Caterpillar Tractor Co.
Advertising Div.
Peoria 8, Ill.
8. The Distributors Group, Inc.
756 Peachtree St.
Atlanta, Ga.
9. The duPont Co.
Petroleum Chemicals Div.
Rockefeller Center
Suite 1810, RKO Bldg.
New York 20, N. Y.
10. Euclid Division
General Motors Corp.
Sales Promotion Dept.
Cleveland 17, Ohio
11. Farm Bureau Mutual Auto Ins.
Co.
Safety Dept.
246 North High St.
Columbus 16, Ohio
(TURN TO PAGE 356, PLEASE)

351 Turk St.
San Francisco, Cal.

6. Bendix Westinghouse Automotive
Air Brake Co.
901 Cleveland Rd.
Elyria, Ohio
7. Caterpillar Tractor Co.
Advertising Div.
Peoria 8, Ill.

Classified Advertisements

SALES REPRESENTATIVES: Opportunity for experienced men with background to represent a prominent Aluminum Truck Body Manufacturer in the Northwest, Southwest and Midwest. Protected territories with unlimited potential earnings as we have the finest pre-fab body on the market and most competitively priced. Reply to Box #14, Commercial Car Journal, 5601 Chestnut St., Philadelphia 39, Pa.

DECAL TRANSFERS, TRUCK AND BUS DECALS: no charge for sketch; durable, brilliant colors. Write for samples. Allied Decals, Inc., 8356 Hough Ave., Cleveland 3, Ohio.

WANTED: USED GM51-71-110 Diesel Injector Parts. Al, 2093 East 19 Street, Cleveland 15, Ohio.

CAR WASHERS



**AUTOMATIC
ALL PURPOSE
SYSTEM
REVOLUTIONIZES
VEHICLE WASHING**

Wohlert
Corporation
LANSING 5 MICHIGAN

WRITE FOR
INFORMATIVE
FOLDER

DETACHABLE MUD GUARD SUPPORT for Tractor or Trailer



- ★ AVOID VIOLATIONS
- ★ INCREASE FLAP LIFE
- ★ EASILY INSTALLED
- ★ CORROSION RESISTANT

WRITE
MA-R-KO Engineering Co.
19609 Schoolcraft Detroit 23, Michigan

**Buy
Bonds**



Use **ATI** HEAVY DUTY MUFFLERS

they fit your engine—
NOT JUST THE EXHAUST PIPE TO GIVE YOU

- Peak Power—Quietly
- Longer Muffler Life
- Minimum Back Pressure
- Better Engine Performance
- Lower Cost Per Mile
- Greater Savings

ASK US FOR PROOF!

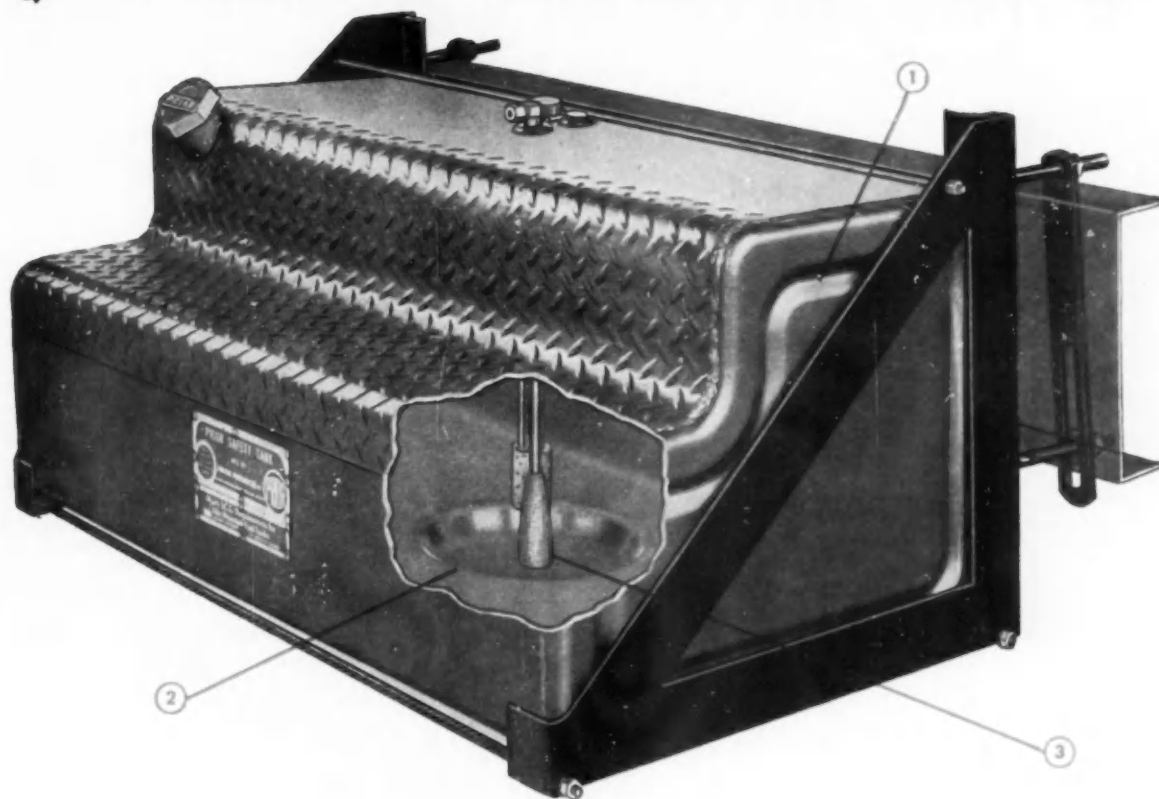
USE **ATI** WHEEL DOLLIES

- These cost and labor saving dollies permit one man to do a brake or wheel bearing job on any surface; protect mechanics from injury; allow ample room for a man to work without removing wheels from dolly.
- ASK YOUR JOBBER FOR A FREE DEMONSTRATION

ONLY
42.50
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Hatboro, Pa.
Dept. F. O.
Osborne
5-7200

Prior **FIRST AGAIN**



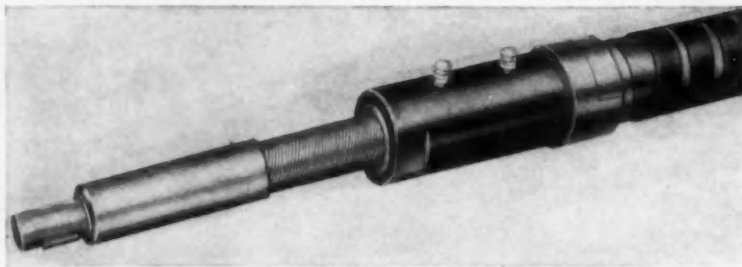
Prior Products announces two more outstanding new additions to the many safety and economy features they have introduced in Safety Fuel Tanks. ① To increase the safety and strength of the "L-Step" Tank Prior Engineers designed special dies to emboss an impact-relieving structural rib as an integral part of the fully flanged tank heads. ② Now all Prior "L-Step" Tanks are equipped with a SUMP in the bottom of the tank permitting full utilization of the entire fuel capacity of the tank. ③ The threat of entry of foreign particles into the fuel line has already been eliminated by the adoption of Monel Filter Tips on all Prior Safety Tanks.

PRIOR PRODUCTS, INC.

P. O. BOX 7608

DALLAS, TEXAS

HOW TO SELECT FLEXIBLE SHAFTING FOR POWER DRIVE APPLICATIONS



1/4-inch STOW Power Drive flexible shaft with core assembly pulled out of casing.

For Power Drive applications, the following factors must be considered:

1. **Torque (Lb. in.)** to be transmitted. (The starting torque should be used in making selections.)
2. **Operating Speeds (RPM)** — If the maximum speed is higher than the rated speed, torque ratings in the table below do not apply. To find the torque capacity for flexible shafts operating at speeds higher than the rated speeds, multiply the maximum dynamic torque capacity by the rated speed, and then divide by the operating speed. (See example.)
3. **Operating Radius** — In making the selection from the table below, the radius of the smallest bend in the flexible shaft should be used.

Ratings — The ratings for flexible shafts shown in the table below apply under the following conditions:

1. when the flexible shaft is adequately supported by clamps along its length. (For unsupported shafts, multiply the calculated torque by a safety factor of 1.6—see example below.)
2. when the flexible shaft is operated in the wind-up direction, which tends to tighten the outer layer of wires. (Flexible shafts operated in the unwind direction will transmit only about 60% of the rated torque.)
3. when the flexible shaft is in continuous operation. Note: the ratings are based on temperature rise. When the operation is intermittent, the ratings in the table may be exceeded. Consult Stow engineers for specific recommendations.

RATED SPEED R.P.M.	MAXIMUM DYNAMIC TORQUE CAPACITY (LB. IN.)									Wgt./ C. Ft.	Core Dia.	Core No. and Type	Shaft Size
	STRAIGHT AND CURVED SHAFTS												
	RADIUS OF CURVATURE IN INCHES												
	50 to Strgt.	25	20	15	12	10	8	6	5				
4,500	2.4	2.2	2.0	2.0	1.92	1.9	1.7	1.5	1.25	3.0	.124/.128	2049 MH	13
3,800	7.0	6.4	6.0	5.8	5.4	5.0	4.6	3.6	2.0	4.5	.148/.152	2081 MH	15
2,900	9.4	8.6	8.0	7.6	7.0	6.6	6.0	4.8	3.4	7.0	.185/.189	5108 MH	19
2,500	22.0	20.0	18.8	17.6	16.0	15.0	12.6	10.8	9.0	12.5	.247/.252	8924 MH	25
1,800	30.0	28.0	26.4	25.0	23.0	21.0	18.0	14.0		20.0	.308/.313	8925 MH	31
1,600	33.8	31.5	29.7	28.1	25.9	23.6	20.2	15.6		20.0	.308/.313	8969 T	31
1,800	36.0	33.0	31.6	30.0	28.0	26.0	22.0	18.0	11.0	21.0	.324/.329	2034 A	31
1,500	80.0	66.0	63.0	58.0	51.0	46.0	37.0	22.0		28.5	.368/.374	2035 A	38
1,500	60.0	54.0	50.0	46.0	42.0	38.0	30.0	24.0		29.0	.387/.393	8970 MH	40
1,500	90.0	81.0	75.0	69.0	63.0	57.0	45.0	36.0		29.0	.387/.393	8971 T	40
1,150	136.0	110.0	104.0	94.0	80.0	72.0	56.0			50.5	.497/.503	8999 A	50
1,150	148	124	110	92	72	56				53.5	.505/.511	6940 T	50
900	248	200	176	124	84					78.5	.610/.618	6997 T	63
900	220	204	192	180	152	130				80.5	.630/.638	7731 A	63
750	340	224	156	76						117	.747/.753	2056 T	75
600	760	520	420							205	.998/1.004	2057 T	100
440	1,500	720								343	1.298/1.304	2058 T	125

EXAMPLE—How to use the table:
The problem is to transmit 1/2 H.P. at 1700 RPM through an unsupported flexible shaft in a 25" radius, estimated starting torque 150% of normal operating torque.

1. Calc. Torque (lb. in.) —

$$\frac{\text{HP} \times 63000}{\text{RPM}} = \frac{.5 \times 63000}{1700} = 18.5$$

2. Correction factor for starting torque

$$1.5 \times 18.5 = 27.75$$

3. Correction factor for unsupported shaft

$$27.75 \times 1.6 = 44.4 \text{ lb. in.}$$

4. Refer to Table No. 1. Read downward in column under 25" radius until you find a core having a rating of at least 44.4 lb. in. In this case we find that core No. 8970 is rated 54 lb. in. at 1500 RPM. Since the given speed is 1700 RPM, multiply 54 by 1500 and divide by 1700. $54 \times 1500 \div 1700 = 47.6 \text{ lb. in.}$ (rated torque at 1700 RPM). Therefore, Core No. 8970 is correct.

For Engineering Bulletin No. 570 and a free torque calculator, write



STOW MANUFACTURING COMPANY

38 Shear Street

Binghamton, New York

Public Relations Films

Continued from Page 354

12. Fruehauf Trailer Co.
Detroit 32, Mich.
13. General Motors Corp.
Department of Public Relations
Film Section

New York City and Long Island
1775 Broadway
New York 19, N. Y.

Eastern States
General Motors Bldg.
Detroit 2, Mich.

Western States
508 San Francisco Bank Bldg.
405 Montgomery St.
San Francisco 4, Cal.

14. Kunz Motion Picture Service
1319 Vine St.
Philadelphia 7, Pa.

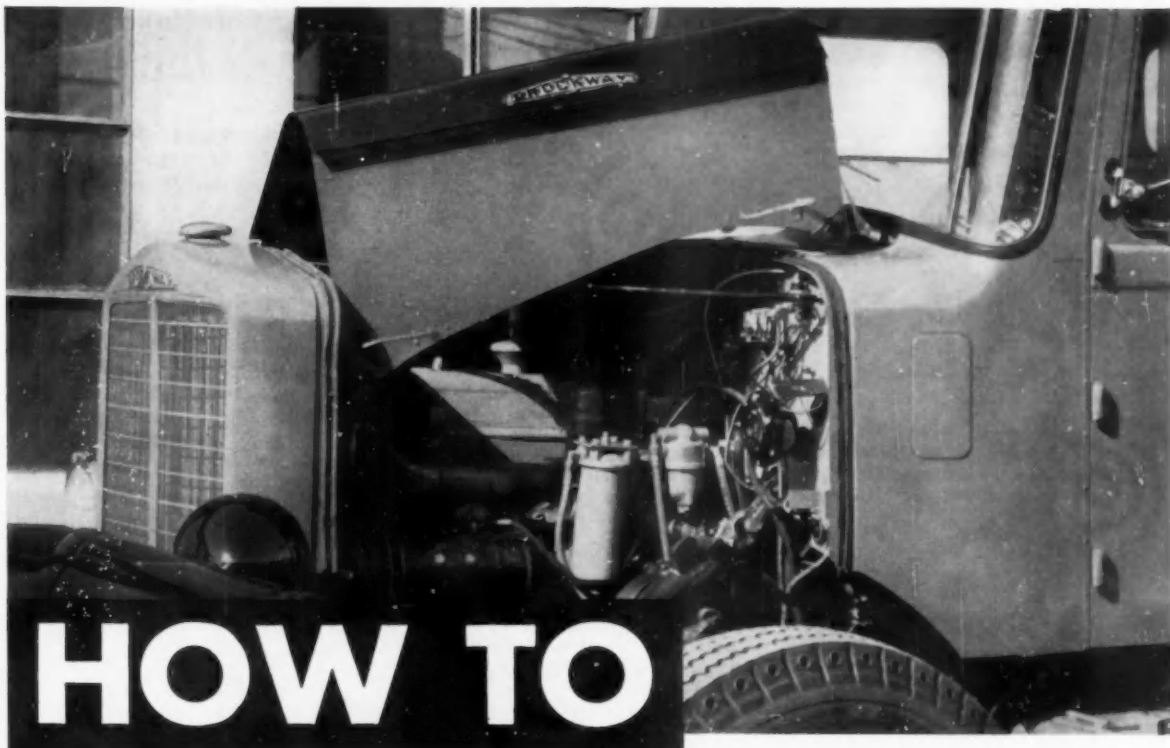
15. Liberty Mutual Ins. Co.
175 Berkeley St.
Boston 17, Mass.

(TURN TO PAGE 358, PLEASE)

English Ford Panel Truck



Latest addition to the English Ford line in the American market is the 3/4-ton Thames "800" Van. It has an overhead valve engine developing 59 hp. The van has a payload capacity of 180 cu ft and is available in solid or two-tone color combinations. The truck comes in a cab and chassis version which permits installation of special bodies. The Thames "800" is sold and serviced by selected Ford dealers.



HOW TO

CLEAN A MOTOR

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AUTOMOTIVE DIVISION



magnus
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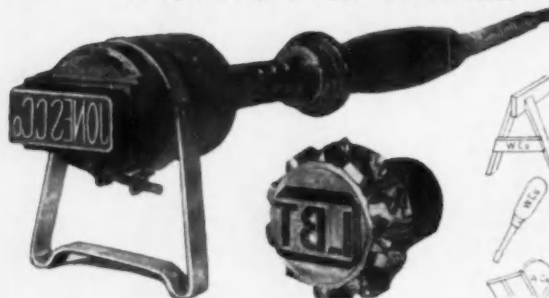
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No. 58

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● **IF YOU WANT TO KEEP TIRE MILEAGE RECORDS** to determine the make of tire that gives the best service—if you want to mark your tires with name or initials to prove ownership—if you want to mark the tools and equipment mentioned above—the brander shown here will serve your purpose. This is the No. 58 Numbering Disk, with all ten digits on the sides and space on the face for initials.

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EVERHOT MFG. CO. - - Maywood, Illinois

Public Relations Films

Continued from Page 356

16. Michigan State University
Audio-Visual Center
East Lansing, Mich.
17. Motor Truck Assn. of Southern
Cal.
605 West Seventh St.
Los Angeles, Cal.
18. National Automobile Transporters
Assn.
Accident Prevention Dept.
2627 Cadillac Tower
Detroit 26, Mich.
19. National Highway Users Confer-
ence
National Press Bldg.
Washington 4, D. C.
20. National Safety Council
Film Bureau
425 North Michigan Ave.
Chicago 11, Ill.
21. Oregon Trucking Assn.
1401 19th St., N.W.
Portland, Ore.

(TURN TO PAGE 360, PLEASE)



TYPE A 800
(Cover Gals)



TYPE B 800
(Cover Gals)

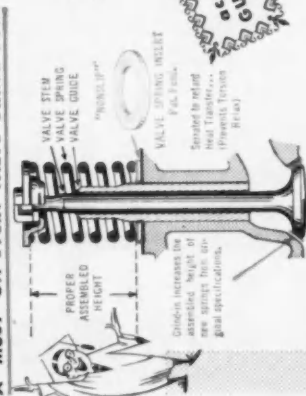
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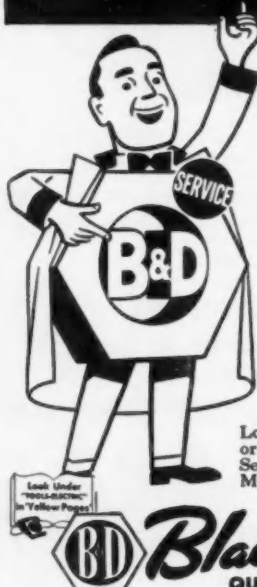


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American Steel & Wire—Cleveland
Columbia-Geneva Steel—San Francisco
National Tube—Pittsburgh
Tennessee Coal & Iron—Fairfield, Alabama
United States Steel Supply—Warehouse Distributors
United States Steel Export Company



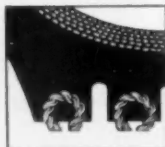
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Public Relations Films

Continued from Page 358

22. Pacific Intermountain Express
Public Relations Div.
299 Adeline St.
Oakland, Cal.
23. Shell Oil Co.
Film Library, Room 4226
50 West 50th St.
New York 20, N. Y.
24. Tomkins Films
1044 West Edgewater Rd.
Los Angeles 26, Cal.
25. Utica Mutual Ins. Co.
First National Bank Bldg.
Utica, N. Y.
26. West Coast Fast Freight, Inc.
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Seattle 4, Wash.
27. The White Motor Co.
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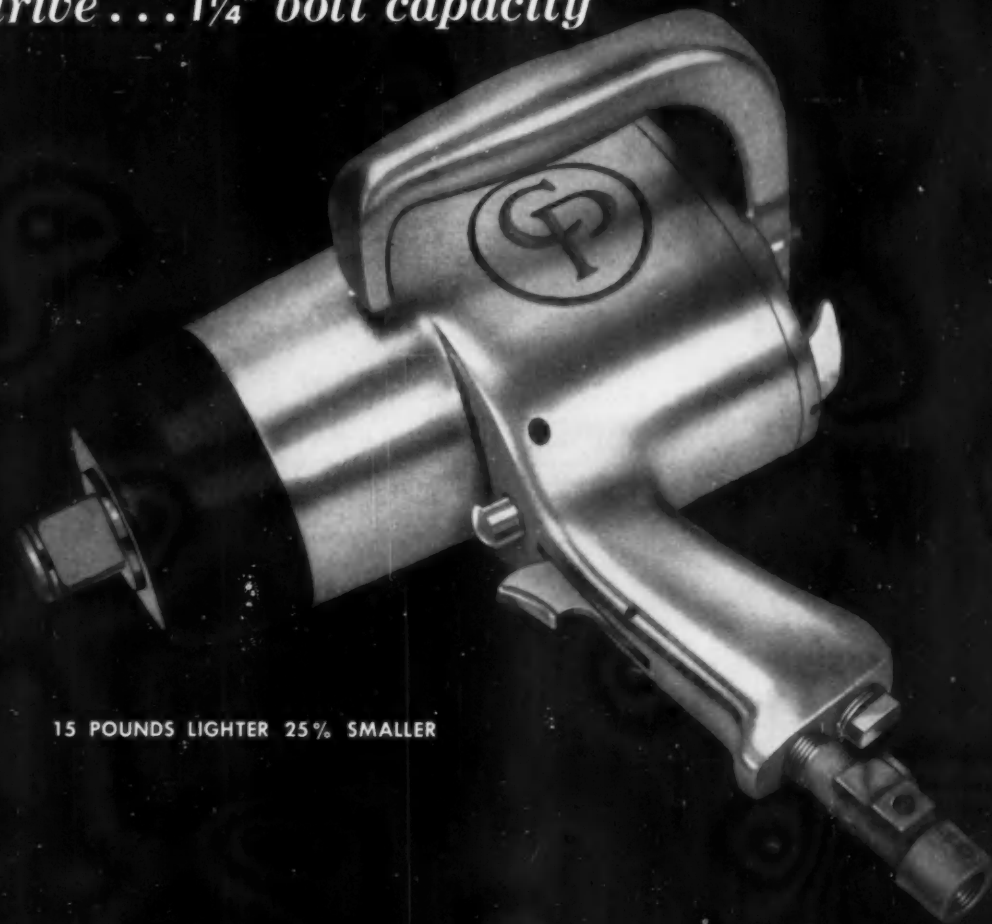
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Fuel Meter

from Service Recorder Co.

1017 Rockwell Ave., Cleveland 14, Ohio

measures the fuel actually used. The "Fuelometer" is installed between the fuel pump and carburetor and records the number of gallons passing through to the engine. Operators can check fuel bills against actual fuel consumption if "padding" is suspected. Off-the-highway operators can use the fuel meter to account for the amount of fuel used when applying for a fuel tax refund. The meter measures accurately to within $\frac{1}{2}$ of one percent, says the maker, and records in tenths of gallons.



Body Plastic Sander

from Porter-Cable Machine Co.

120 Exchange St., Syracuse 4, N. Y.

is for use with quick-hardening plastic body paste. The sander has a vacuum attachment for picking up the plastic dust. It sands vertically and does not gouge, says the manufacturer. No. 40 grit aluminum oxide production paper is recommended for use with the sander on plastic body materials.



Dynamometer

from Otis Auto Dynatester, Inc.

75-02 88th St., Glendale 27, N. Y.

permits actual road testing of cars, trucks and buses while in the garage. Called a "Dynatester," the unit absorbs and applies force while operating at road speeds. A vehicle can be thoroughly road tested without leaving the shop. Shown is a mechanic checking for wheel wobble. The dynamometer is turning the front wheels at 70 mph. Using the rear wheels, power output, braking force, acceleration and deceleration, and engine operation can be checked.

Paint Spray Gun

*from The DeVilbiss Co.
300 Phillips Ave., Toledo, Ohio*

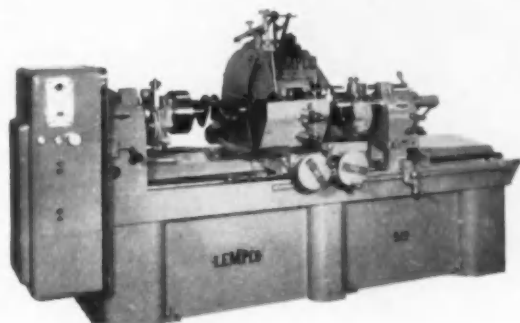
is separated from the paint cup for lighter weight and more maneuverability. Inaccessible areas can be painted better and faster, says Devilbiss, and having only the spray gun to hold in one hand reduces fatigue. The unit features five-way spray control, including fluid pressure regulation, fluid flow rate, air flow adjustment, pattern size control and atomization air pressure regulation.



Crankshaft Regrinder

*from Lempco Products, Inc.
Dunham Road, Bedford, Ohio*

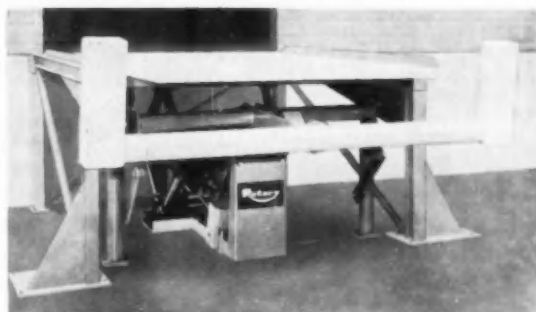
cuts time and cost on crankshaft balancing during rod journal grinding. The Model No. 519-60F was recently introduced at the Pacific Automotive Show and features a "feather-touch" push-button control which balances the crankshaft. The machine is extremely accurate, says the manufacturer, and it cuts set-up time to a matter of seconds.



Automatic Dock Ramp

*from Rotary Lift Co.
1054 Kansas St., Memphis 2, Tenn.*

adjusts its height to fit on the tailgate or truck rear for loading and unloading operations. Using no counterweights, the ramp automatically raises as a backing truck trips the mechanism. A moment later it descends on to the rear of the truck bed and is ready to handle up to 20,000-lb loads. The ramp automatically adjusts or compensates for height change as weight is added to the truck or trailer. There is no fly-up or jump when heavy loads cross the ramp on to the truck, says the manufacturer. Another feature is automatic alignment with "out of square" trucks. The dock ramp is available in models for recessed or front-of-dock installation.

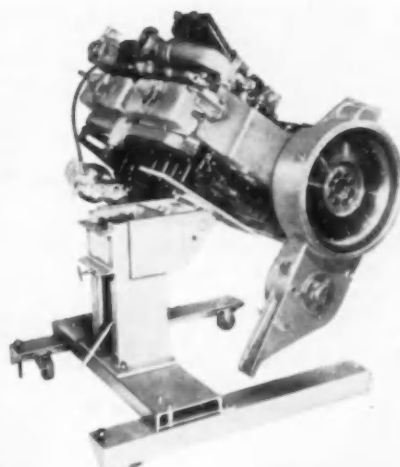


Diesel Engine Stand

*from Kent-Moore Organization, Inc.
28635 Mound Rd., Warren, Mich.*

handles all large truck diesels and, with adapters, other large or small gasoline engines. A hydraulic pump lifts the side mounted engine to a horizontal position at which time it can be raised or lowered to convenient working height. All hand cranking is eliminated. Using tapered roller bearings, the stand is designed for heavy-duty service, says the maker, and is operated by one man.

(TURN TO NEXT PAGE, PLEASE)



New Product Descriptions

Continued from Page 363

Reamer and Grinder

from Hall-Toledo, Inc.
2931 South Ave., Toledo 9, Ohio
is a dual purpose tool which simplifies valve service work, says the maker. The tool reams valve guides oversize



and counterbores the head or block prior to inserting new valve seat rings. Both operations are accom-

plished by a single machine setting and features expandable cutters with a variation from $\frac{3}{16}$ to $\frac{3}{8}$ in. and any angle up to 45° .

Turn Signal Flasher

from Qualelectric Corp.
990 East 67th St., Cleveland 6, Ohio
is for 6 and 12-volt systems and has closed circuit wiring to give a steady flashing rate under all conditions. A loud clicking sound is made by the flasher to indicate that it is on. The turn signal flasher meets all SAE Class A tests, says the manufacturer.

Truck Mufflers

from Alexander-Tagg Industries, Inc.
Hatboro, Pa.
are designed to fit the cu in. displacement of each make and size truck engine. Featuring welded steel construction, the mufflers meet state noise standards and have low back pressure, says the maker. ATI mufflers are made in three basic models—two for gasoline engines and one for diesels.

Fiberglas Seat

from American Seating Co.
Grand Rapids 2, Mich.

is contoured for passenger comfort and spring-mounted for shock absorption. The Model No. 410 bus seat is



light in weight and has a basic frame of welded tubing which supports the plastic-molded seat and forms a grab rail at the rear. Center of the seat has a nonslip area. The seat material is soil-resistant and washable. Deep scratches, breaks or cuts are easily repaired, says the manufacturer. Fire-resistant resin is available as an optional material.

(TURN TO PAGE 366, PLEASE)

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76 Pages—275 Illustrations
56 Engine Reference Tables
26 Parts Lists

- Diesel Compression Testers
- Nozzle Testers for American Bosch, Caterpillar and Bendix Nozzles
- Cummins Injector Tester
- International Harvester Injection Testers
- General Motors Injector Testers
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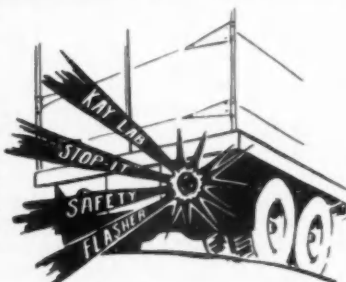
2

AD-15

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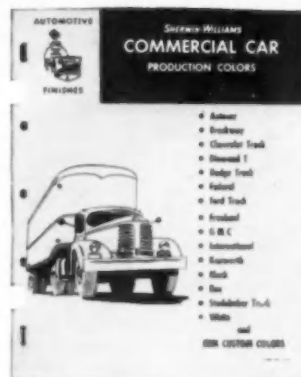
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to faster fleet refinishing...

Here's handy help in ordering finishes to match factory production colors on all makes of commercial cars!

This 32-page catalog of Sherwin-Williams Commercial Car Production colors contains color swatches and catalog listings of all popular commercial car colors available in KEM Enamel factory packaged colors or as custom-mixed quality enamel or lacquer colors. Cross-references simplify ordering — actual color samples aid selection of new color schemes from a wide choice of conveniently available standard colors. This comprehensive manual also contains full data on recommended air-dry and bake systems, metal preparation, etc.

If your operations involve refinishing or color styling of commercial fleets, a copy of this up-to-date Commercial Color Catalog O-149 will be supplied for your use without obligation. Please write on your company letterhead to The Sherwin-Williams Co., Automotive Division, Cleveland 1, Ohio.



SHERWIN-WILLIAMS

AUTOMOTIVE FINISHES

New Products

Continued from Page 364

Tire Tube Patches

from A. Schrader's Son Division
c/o G. M. Basford Co.
60 East 42nd St., New York 17, N. Y.

are of the self-vulcanizing type and repair punctures up to 1/4-in. diameter. Called "Fix Flats," these patches are the cold-type, requiring no heat or special vulcanizers. They come in six sizes, are nylon reinforced, and are made for both tube and tubeless tire repairs.

Mobile Radio

from Communications Products Dept.
General Electric Co.
Electronics Park, Syracuse, N. Y.

is transistor-powered and thermostatically protected against excessive heat or overload. The unit has a 100-watt capacity and operates in the 25-54 mc frequencies. Made of brushed aluminum, the mobile radio sink resembles a waffle grid which, says G-E, provides better heat dissipation regardless of how the unit is mounted in the vehicle. The cut-off and re-set feature is automatic and gives complete protection to the unit under all conditions.

Air-Wrench

from Chicago Pneumatic Tool Co.
6 East 44th St., New York 17, N. Y.

has a 1-in. square drive, handles bolts and wheel nuts up to 1 1/4-in. diameter and features a "Vari-Tork" power converter. Motor output is sustained



by the flywheeling action of the striking hammer. Impact action is controllable so that large and small nuts may be safely driven to proper tightness.

A 6-in. extension shank gives the reach and clearance required on deep recessed rim designs.

Tire Tool

from Ken-Tool Mfg. Co.
768 East North St., Akron 5, Ohio

fits all center-post type tire-changing machines. Called the "Slik-Stik," it is for use on tubeless as well as tube-



type tires in sizes up to 17 in. One end is for mounting beads on the rim, the other end for demounting. The Model No. T-143 will not damage beads or sealing surfaces of new 14-in. tubeless tires, says the maker.

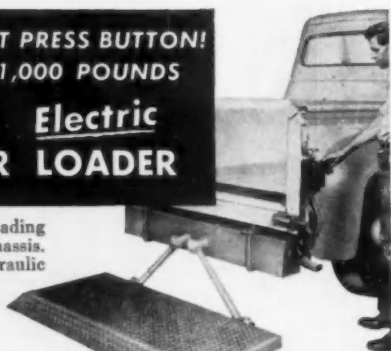
Timing Light

from E. Edelmann & Co.
2332 Logan Blvd., Chicago 47, Ill.
is made for unlimited use without
(TURN TO PAGE 368, PLEASE)

PRESTO! JUST PRESS BUTTON!
LIFT UP TO 1,000 POUNDS

CURTIS Electric MASTER LOADER

Ample for ALL loading jobs. Mounts on chassis. Smooth, electro-hydraulic system rises or lowers at any point.



Amazing simplicity and ease for use on any model truck rear or side door. Loads lifted straight up. Platform can be loaded from either side. Light weight but sturdy. Mounts on chassis quickly with 2 sturdy U-bolts. No alterations to truck needed. Can be transferred to any other truck. "Power package" and remote control unit hug the truck. All moving parts (except lifting arms) completely housed for safety.

• For 1/2, 3/4 or 1 ton pick-up or stake trucks

CURTIS MASTER LOADER SAVES TIME, MONEY, MEN, REDUCES CHANCES OF PERSONAL INJURY, PROPERTY DAMAGES; INCREASES EFFICIENCY; LOWERS HANDLING COSTS.

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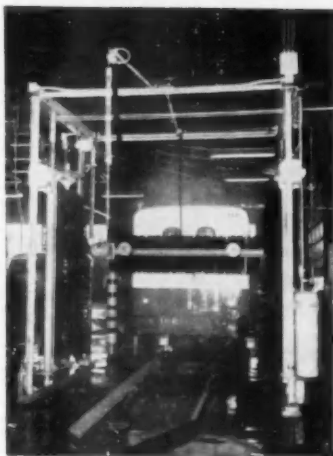
✓ **AND OUTSIDE** . . . GUNK Super-Concentrate is a heavy-duty degreaser and emulsifier that can be sprayed, brushed or wiped on engines and machinery and then hosed off with clear water. Result: GUNK's self-scouring action has produced a factory-new appearance. It is one of the most remarkable and successful emulsifying degreasing solvents on the market. No toxic vapors, non-caustic, safe to skin.

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Plants → GUNK Chicago Company Chicago 38 (Licensee)



Master FLEET WASHER

AUTOMATIC BUS AND TRUCK WASHER

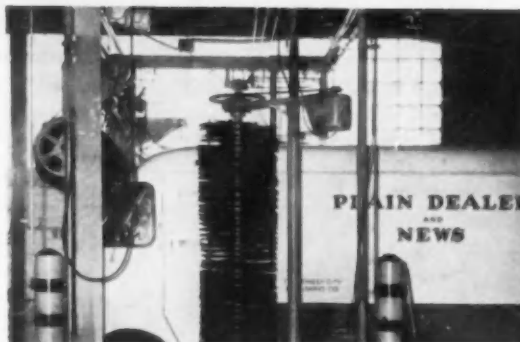


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AUTOMATICALLY

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**CAN WASH
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PER DAY**



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- ☐ HAVE REPRESENTATIVE CALL TO
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City

Zone

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**CENTRAL-TRUST-BLDG.
DEPT. CCJ-58 ALTOONA, PA.**

ACME EQUIPMENT, INC.

New Products

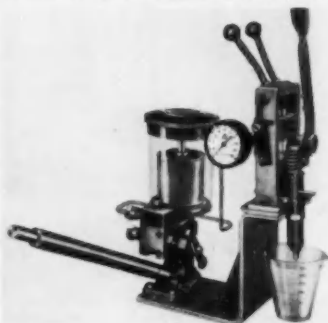
Continued from Page 366

danger of burned out circuits. The light is for use on 6, 12, 24 and 48-volt ignition and magneto systems. No adjustment for different voltages is needed. Called the Model No. 121 "Cold Circuit" light, the unit weighs 12 oz and is made of Bakelite.

Injector Tester

from Bacharach Industrial Instrument Co.
201 North Braddock Ave.
Pittsburgh 8, Pa.

handles all types of General Motors two-cycle diesels. Shown here is the model for GM 71 and 71T injectors.



With adapters, it also tests GM 6-110 and 4,6-51 injectors.

Spring Inserts

from Silver Seal Products Co.
Lincoln Park, Mich.

restore valve spring tension and come in two sizes. Type "A" is .060 in. thick and is for use on valves already in



service. Type "B" is .030 in. thick and is used with new valve springs. No gage is necessary for installation. Serrated louvers in the insert prevent slipping and torsion relax caused by heat and continuous flexing.

Fifth Wheel

from Trailmobile, Inc.
31st and Robertson Ave.
Cincinnati 9, Ohio

is 38-in. wide and grips the trailer kingpin at the large and small diameters simultaneously. Called the "Wide-Stance" fifth wheel, it has one-piece jaw grips at both the large and small kingpin diameters. It has two moving

parts and locks automatically. Unlocking requires manual release. The new fifth wheel offers lower height—6¼ in. from tractor frame to top of the plate. Trailer break-away is greatly reduced, says Trailmobile, since the kingpin is secured at both ends instead of one.

Wheel Cylinder Cups

from Signal-Stat Corp.
523-539 Kent Ave., Brooklyn 11, N. Y.
come in a plastic kit. It contains 80 "Coni-Seal" wheel cylinder cups which have cones that compensate for over-



size and out of round brake cylinders. The "Coni-Seal" wheel cylinder cups are made to withstand quick pressure build-ups of power brakes, says the manufacturer.



Learn today how ROBESON PRODUCTS can save you time, money and equipment by writing

RUST-INHIBITOR PRIMER PAINT AND HEAVY-DUTY EQUIPMENT ENAMEL WILL CUT YOUR MAINTENANCE COSTS

The PRIMER gives excellent rust-resistance, is fast drying (30-40 min.) and forms an excellent surface for applying the enamel. It is abrasion-resistant. Can also be used on marine and floating equipment.

Also manufacturers of ROBESON PRESERVO, the easily applied liquid which makes tarps water, weather and mildew-resistant and doubles the life of canvas.

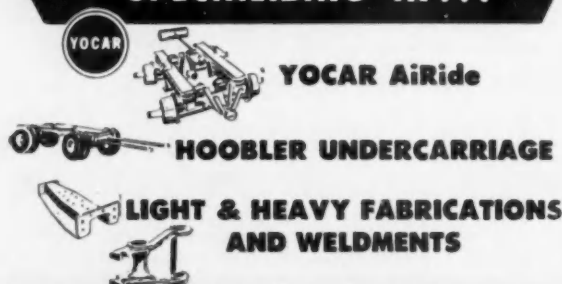
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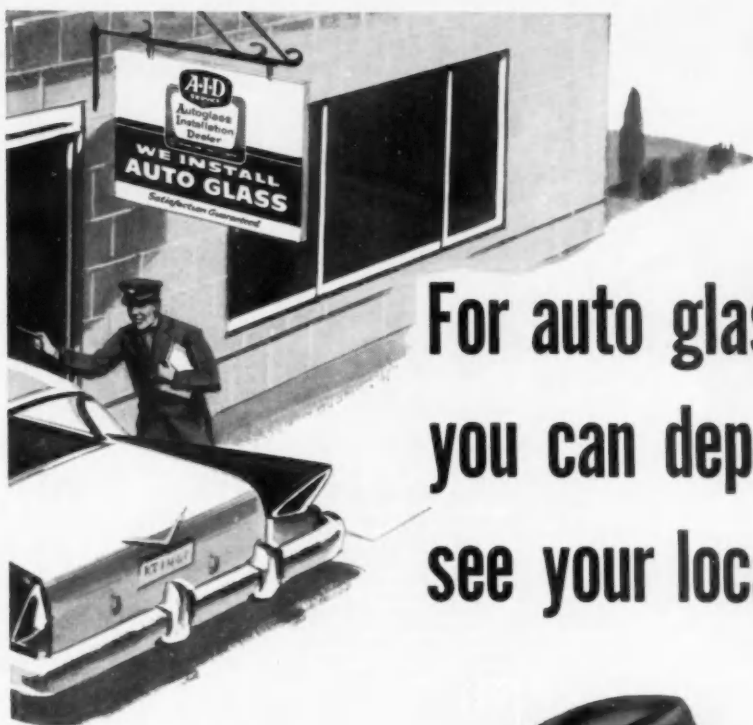
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* **A.I.D.** stands for Autoglass Installation Dealer. It's a name given to dealers who are constantly striving to give you

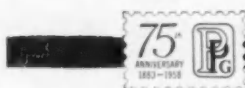
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sistently follow the highest standards of auto glass installation service.

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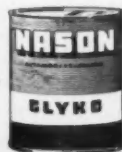
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- Ideal for trucks, trailers, machinery

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**COMING
or GOING!**



...You get more
Moving Billboard Value—with
MEYERCORD DECAL TRUCK SIGNS!

The makers of Hiland Potato Chips are missing no bets in selling the public with their truck fleet. Coming, going or parked ... you see these colorful moving billboards as they make their way from store to store on the busy streets. Featured is the attractive package with its eye-catching plaid tartan panel! Hand painting these signs would cost a fortune ... yet the cost of decorating each truck with Meyercord Decal Truck Signs is moderate—and application lay-up time is just a couple of hours. If you have a fleet of ten or more trucks you'll find it worth your while to investigate the savings, uniformity and convenience of Meyercord Decals.

Our full color brochure "Ads on Wheels" is free ... ask for your copy on company letterhead ...



the MEYERCORD co.
Dept. T-515, 5323 West Lake Street Chicago 44, Illinois



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NEWS



**Self-powered cab
air conditioner
cuts cooling costs**

Keeps any size cab
comfortably cool ...
on the road
or during stops.



The Onan Kab Kooler keeps the driver alert and comfortable, improves safety and efficiency. Cools at lower cost because it is self-powered with an Onan air-cooled gasoline engine. No complicated plumbing. Easily installed and removed. Starter button and controls within easy reach of driver. Fully tested ... shipped complete, ready to install.

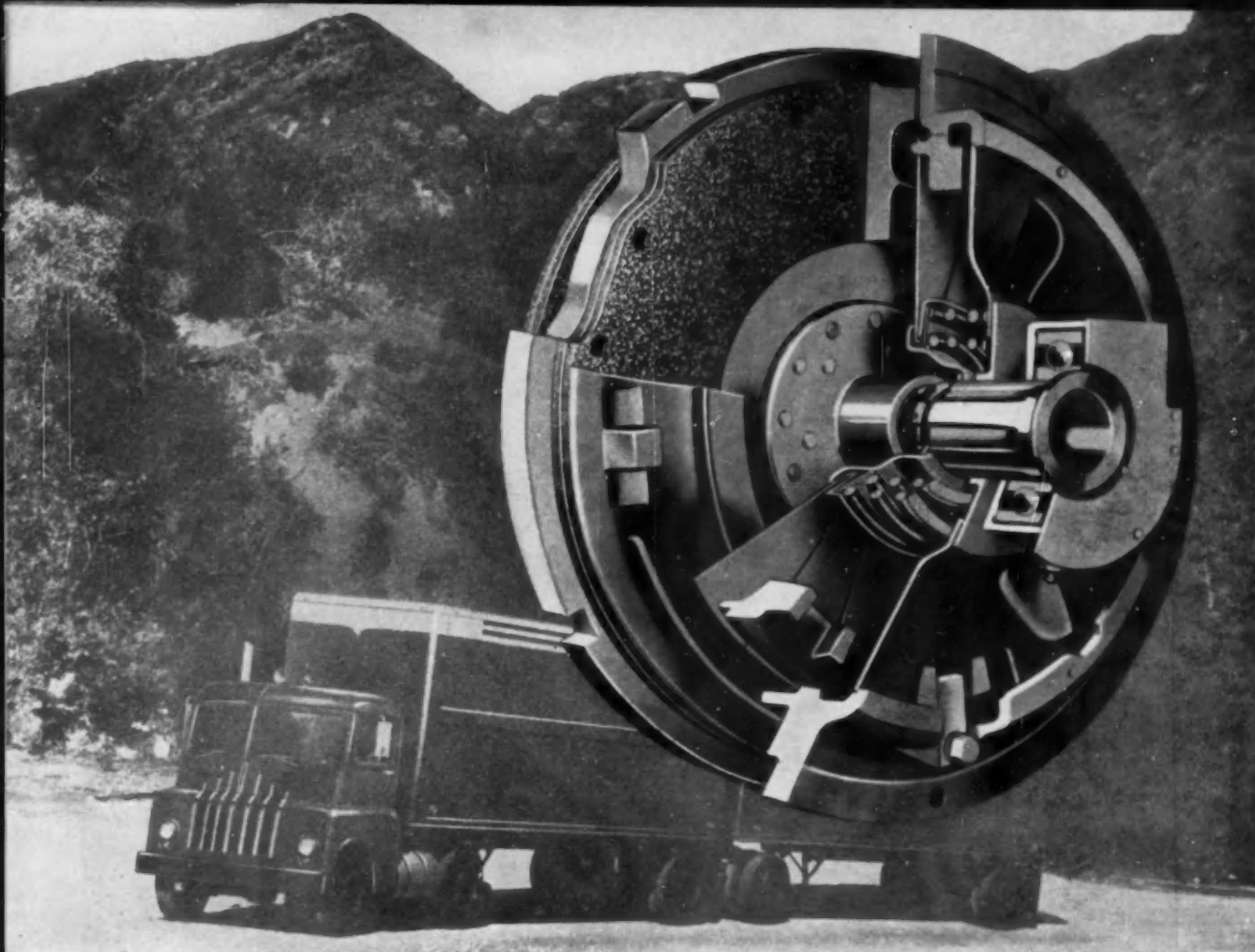
See your local truck dealer or write direct

D. W. ONAN & SONS INC.

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ELECTRIC PLANTS • AIR-COOLED ENGINES • GENERATORS • KAB KOOLER





Western Fleets Report:

150,000 to 200,000 trouble-free miles from Spicer H-D Clutches

Western terrain means rugged service for clutches. Yet, one West Coast operator says, "The only time we touch the Spicer Clutch is at the end of 200,000 miles. Then, we rebuild the engine and overhaul the clutch — whether it needs it or not."

Still another fleet owner states, "We don't even bother with preventive maintenance for our Spicer Clutches. They're absolutely trouble-free from one

overhaul period to another — or about 150,000 miles."

Make sure your clutches last at least as long as the engine by installing Spicer Heavy-Duty Clutches. They're available in a unitized assembly . . . including release bearing, bearing housing and yoke. Specify Spicer on your next job.

For further information or technical assistance contact the Dana Engineer.

DANA CORPORATION

• Toledo 1, Ohio

DANA PRODUCTS Serve Many Fields:

AUTOMOTIVE: Transmissions, Universal Joints, Propeller Shafts, Axles, Power-Lok Differentials, Torque Converters, Gear Boxes, Power Take-Offs, Power Take-Off Joints, Clutches, Frames, Forgings, Stampings.
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AGRICULTURE: Universal Joints, Propeller Shafts, Axles, Power Take-Offs, Power Take-Off Joints, Clutches, Forgings, Stampings.

MARINE: Universal Joints, Propeller Shafts, Gear Boxes, Forgings, Stampings.

Many of these products manufactured in Canada by Hayes Steel Products Limited, Merrifton, Ontario.



Announcing...the ALL-NEW "Champ"



ALUMINUM DELIVERY BODIES



Beautiful... **BIG**... and extra-light!

Now, your Dorsey Distributor can install the newest, lightest and toughest of truck bodies, built to meet your specifications. Both standard and extra-cube models are available, with true Monocoque construction: Heat-treated aluminum stressed skin is structurally-riveted to extruded aluminum-alloy Z-stiffeners, corner posts and longerons. Although light in weight—standard model averages 100 lbs. per foot of length—the Champ has the strength and engineering that has distinguished Dorsey products for 47 years. Permanently lustrous side sheets never need painting, make a beautiful background for your company name!

*Available features include choice of doors
side doors, wheel housing for low mount,
insulation, floors and interior finishes.*

Your Dorsey Body Distributor is a substantial independent businessman with a factory-trained organization



DORSEY TRAILERS

•

ELBA, ALABAMA

HIGH TEMPERATURES + HIGH PRESSURES = CLEAN TANKERS

*Malsbary
High Pressure Combination
cleaning enables
Hearin Tank Lines to
switch cargoes quickly,
practically eliminates
"re-cleaning" trips
and "lost" hauls.*



Hearin's maintenance superintendent, J. Ralph Johnson, sums up cleaning thus: "Without cleaning we'd simply lose our business...our drivers do a more efficient job operating clean, shiny trucks...and it's good public relations to have neat-looking equipment."

Hearin Tank Lines, Baton Rouge, serves only the petroleum industry, hauls some 24 different materials, ranging from gasoline and asphalt to sulphuric acids and carbon black. Tank trucks naturally require decontamination when changing from one type of cargo to another. If the cleaning job isn't thorough enough, oil company inspectors return the tank for recleaning.



Tankers aren't only ones to benefit from HPC cleaning. Here 2 guns team up on chassis and fifth wheel for Pacific Intermountain Express. With Malsbary 300 HPC cleaners you can cold rinse with 1 gun, while simultaneously using 1 other gun for hot solution cleaning or degassing—a real help on big fleets. (500 HPC same action with 2 guns.)

"High temperatures and high pressures are needed to kick loose caked films and slime inside tanks. We just weren't getting the job done with our old steam vapor cleaner. Trucks waiting to be cleaned backed up so we were losing 30 to 40 jobs weekly at \$50 to \$400 per job."

Then Hearin installed a Malsbary 300 HPC (high pressure combination) cleaner. It delivers 325° F. solution at 400 psi., pumps from 240 to 1200 gallons hourly, depending on temperature used. Its hot, explosive blast cleans single-compartment tanks in 30 minutes—old machine required 3-4 hours. Entire rig—tractor and trailer—can be cleaned in 3-6 hours; old machine took 6-10 hours. "And cleaning efficiency is so high we average only one truck monthly returned for recleaning, against six in the past."

Money-Back Offer—See for yourself; buy a 300 or 500 HPC cleaner from your Malsbary dealer. If after 10 days' use you aren't completely satisfied that it reduces truck cleaning costs, return it and our dealer will refund your money. Call him now...or write us for further details and helpful truck cleaning data.



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B.F. Goodrich



Smileage!



B.F. Goodrich tires roll 140,000 miles before retreading, user reports

THE Chelsea Milling Co. of Chelsea, Michigan, manufactures prepared flour mixes for home use. A fleet of tractor-trailers distributes these products nationally. Tire trouble was a problem until the company switched to B.F. Goodrich Traction Express tires. The report today: failures and bruise-blowouts virtually eliminated, 140,000 miles *before* retreading—far more than from any other make!

One reason for this outstanding service is the B.F. Goodrich FLEX-RITE NYLON cord body. FLEX-RITE

NYLON withstands double the impact of ordinary cord materials, resists heat blowouts and flex breaks. No wonder the B.F. Goodrich FLEX-RITE NYLON cord body outwears even the extra-thick Traction Express tread—can still be retreaded over and over!

Now you get even more traction and protection against slippage because of the new Safety Grip tread. Grip blocks have been molded into the Traction Express tread. Hundreds of extra skid-resisting, road-gripping edges give you positive pulling power

in forward or reverse.

Take a tip from fleet operators like Chelsea. Switch to B.F. Goodrich Traction Express Safety Grip tires and get longer mileage plus greater traction. See your nearby B.F. Goodrich dealer today or write *B.F. Goodrich Tire Co., A Division of The B.F. Goodrich Co., Akron 18, Ohio.*

Specify B.F. Goodrich Tubeless or tube-type tires when ordering new trucks or trailers

Your B.F. Goodrich dealer is listed under Tires in the Yellow Pages of your phone book

B.F. Goodrich truck tires

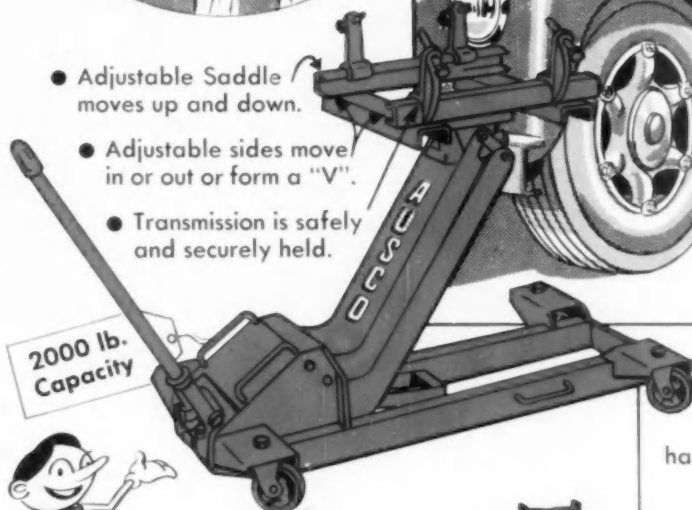
Looks like you're going to have to pull the transmission.

TRUCK TRANSMISSION JOBS DON'T BOTHER US ANY MORE!

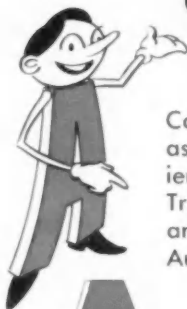
Not since we got our handy Ausco Hydraulic Truck Transmission Handler



- Adjustable Saddle moves up and down.
- Adjustable sides move in or out or form a "V".
- Transmission is safely and securely held.



2000 lb.
Capacity



Call your Ausco jobber and ask him about the convenient, safe Ausco Hydraulic Truck Transmission Handler and how well it works with Ausco Steel Garage Horses.



AUSCO Jacks

AUTO SPECIALTIES MFG. CO., INC. St. Joseph, Michigan

Other plants in Benton Harbor and Hartford, Mich. and Windsor, Ont., Can.

That's a mighty handy jack for lots of jobs!

Makes handling transmissions, carriers and differentials safer, too!



Ausco...
Quality Jacks
for every
service need!



Bipod
Bumper
Jacks



Garage
Horses



One End Lift
Hydraulic and
Mechanical



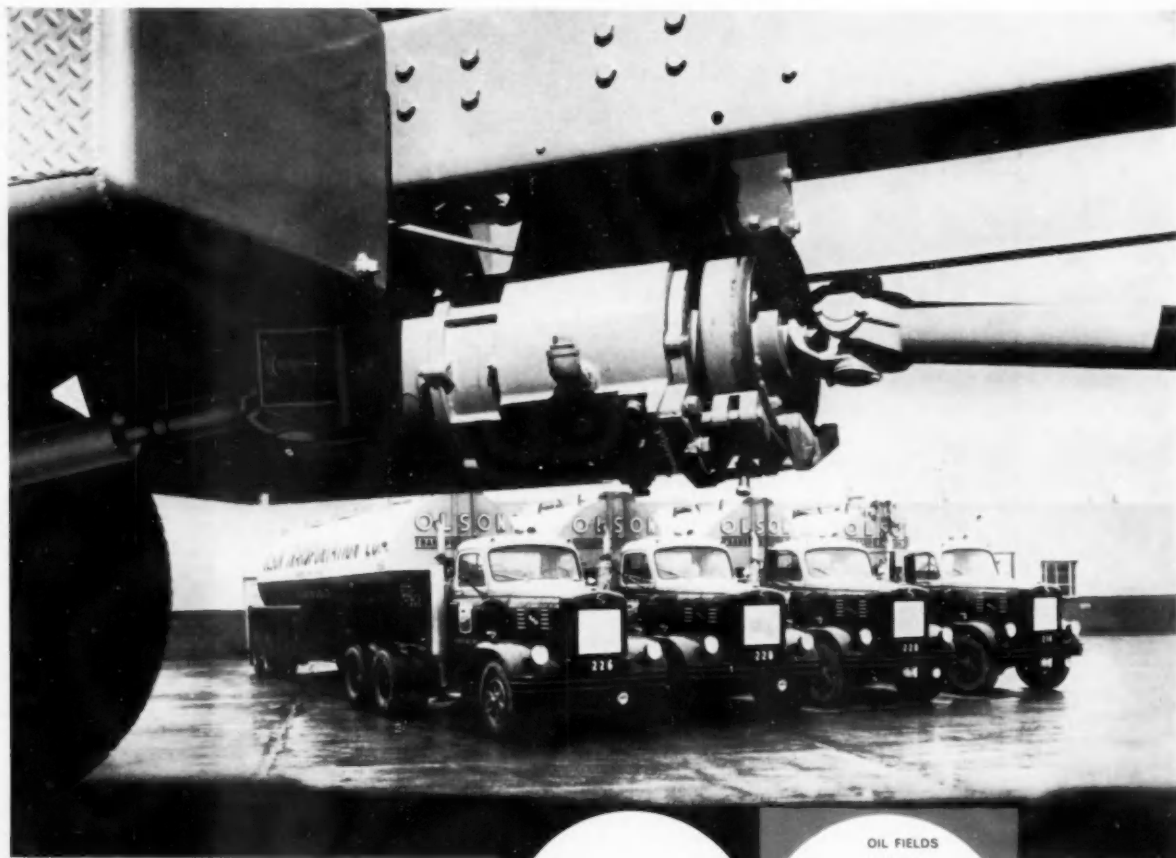
Hydraulic
Service Jacks

Hydraulic
Hand
Jacks



**You're looking at an exclusive
FWD benefit for transport**

The difference in FWD is the center differential—the exclusive power-proportioning differential that puts power in both axles. Both power and weight are scientifically proportioned between the axles and these advantages are putting FWD tractors in more new fleets every day! Bigger payload; the finest traction control on any roadway, in any weather; up to 37% greater savings from longer tire wear. These are just a few FWD advantages that can make money for your operation! Now's the season to get the whole story. Write THE FOUR WHEEL DRIVE AUTO COMPANY • CLINTONVILLE, WISCONSIN • CANADIAN FACTORY • KITCHENER • ONTARIO. World-wide parts and service.



HEAVY-DUTY VEHICLE SPECIALISTS

FWD
®

VEHICLES FOR

OIL FIELDS
UTILITIES
FIRE FIGHTING
CONSTRUCTION
ROAD MAINTENANCE
CRANE CARRIERS
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